



RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT VOLUME I SCH NO. 2000061027



Prepared for | City of Rancho Cucamonga (Lead Agency)
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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 Executive Summary	1-1
1.1 Introduction.....	1-1
1.2 Project Summary.....	1-1
1.2.1 Project Location.....	1-1
1.2.2 Rancho Cucamonga General Plan Update	1-1
1.3 Project Alternatives	1-2
1.4 Issues to be Resolved	1-3
1.5 Areas of Controversy.....	1-4
1.6 Summary of Significant Adverse Environmental Impacts.....	1-4
1.7 Mitigation Monitoring	1-5
2.0 Introduction	2-1
2.1 Purpose and Type of this EIR	2-1
2.1.1 Agencies Having Jurisdiction.....	2-3
2.1.2 Incorporation by Reference	2-4
2.2 EIR Focus.....	2-4
2.2.1 Scoping Process.....	2-4
2.2.2 Environmental Analysis	2-6
2.2.3 Project Sponsor and Contact Person	2-8
2.3 Public Review of the Draft EIR	2-9
3.0 Project Description	3-1
3.1 Project Location.....	3-1
3.2 Environmental Setting	3-1
3.2.1 Project Setting and Characteristics.....	3-1
3.3 Project Objectives	3-2
3.4 Project Description	3-3
3.4.1 Overall Framework	3-3
3.5 Intended Use of the EIR	3-13
3.5.1 City of Rancho Cucamonga.....	3-13
3.5.2 Responsible and Trustee Agencies.....	3-13
4.0 Environmental Setting, Thresholds of Significance, Environmental Impacts, Mitigation Measures, Cumulative Impacts, and Level of Significance After Mitigation	4-1
4.0.1 Approach to Cumulative Impact Analysis.....	4-2
4.1 Aesthetics.....	4.1-1
4.1.1 Relevant Policies and Regulations.....	4.1-1
4.1.2 Existing Conditions.....	4.1-7
4.1.3 Thresholds of Significance.....	4.1-8
4.1.4 General Plan Goals and Policies.....	4.1-9
4.1.5 Standard Conditions of Approval.....	4.1-16
4.1.6 Environmental Impacts.....	4.1-18
4.1.7 Cumulative Impacts.....	4.1-22
4.1.8 Mitigation Measures.....	4.1-23
4.1.9 Level of Significance After Mitigation.....	4.1-23
4.2 Agriculture and Forest Resources	4.2-1
4.2.1 Relevant Policies and Regulations.....	4.2-1
4.2.2 Existing Conditions.....	4.2-3
4.2.3 Thresholds of Significance.....	4.2-4

4.2.4	General Plan Goals and Policies	4.2-5
4.2.5	Standard Conditions of Approval	4.2-5
4.2.6	Environmental Impacts	4.2-5
4.2.7	Cumulative Impacts	4.2-8
4.2.8	Mitigation Measures.....	4.2-8
4.2.9	Level of Significance After Mitigation.....	4.2-8
4.3	Air Quality	4.3-1
4.3.1	Relevant Policies and Regulations	4.3-1
4.3.2	Existing Conditions	4.3-6
4.3.3	Thresholds of Significance.....	4.3-13
4.3.4	General Plan Goals and Policies.....	4.3-14
4.3.5	Standard Conditions of Approval.....	4.3-28
4.3.6	Environmental Impacts	4.3-28
4.3.7	Cumulative Impacts	4.3-34
4.3.8	Mitigation Measures.....	4.3-34
4.3.9	Level of Significance After Mitigation.....	4.3-36
4.4	Biological Resources	4.4-1
4.4.1	Relevant Policies and Regulations	4.4-1
4.4.2	Existing Conditions	4.4-4
4.4.3	Thresholds of Significance.....	4.4-22
4.4.4	General Plan Goals and Policies.....	4.4-23
4.4.5	Standard Conditions of Approval.....	4.4-24
4.4.6	Environmental Impacts	4.4-27
4.4.7	Cumulative Impacts	4.4-31
4.4.8	Mitigation Measures.....	4.4-32
4.4.9	Level of Significance After Mitigation.....	4.4-32
4.5	Climate Change.....	4.5-1
4.5.1	Relevant Policies and Regulations	4.5-1
4.5.2	Existing Conditions	4.5-11
4.5.3	Thresholds of Significance.....	4.5-15
4.5.4	General Plan Goals and Policies.....	4.5-16
4.5.5	Standard Conditions of Approval.....	4.5-33
4.5.6	Environmental Impacts	4.5-36
4.5.7	Cumulative Impacts	4.5-44
4.5.8	Mitigation Measures.....	4.5-45
4.5.9	Level of Significance After Mitigation.....	4.5-46
4.6	Cultural Resources	4.6-1
4.6.1	Relevant Policies and Regulations	4.6-1
4.6.2	Existing Conditions	4.6-4
4.6.3	Thresholds of Significance.....	4.6-12
4.6.4	General Plan Goals and Policies.....	4.6-12
4.6.5	Standards Conditions of Approval	4.6-17
4.6.6	Environmental Impacts	4.6-17
4.6.7	Cumulative Impacts	4.6-19
4.6.8	Mitigation Measures.....	4.6-20
4.6.9	Level of Significance After Mitigation.....	4.6-22
4.7	Geology and Soils	4.7-1
4.7.1	Relevant Policies and Regulations	4.7-1
4.7.2	Existing Conditions	4.7-5
4.7.3	Thresholds of Significance.....	4.7-14
4.7.4	General Plan Goals and Policies.....	4.7-14
4.7.5	Standard Conditions of Approval.....	4.7-16
4.7.6	Environmental Impacts	4.7-18

	4.7.7	Cumulative Impacts	4.7-27
	4.7.8	Mitigation Measures.....	4.7-28
	4.7.9	Level of Significance After Mitigation.....	4.7-28
4.8		Hazards and Hazardous Materials	4.8-1
	4.8.1	Relevant Policies and Regulations	4.8-1
	4.8.2	Existing Conditions	4.8-9
	4.8.3	Thresholds of Significance.....	4.8-11
	4.8.4	General Plan Goals and Policies.....	4.8-12
	4.8.5	Standard Conditions of Approval.....	4.8-13
	4.8.6	Environmental Impacts	4.8-15
	4.8.7	Cumulative Impacts	4.8-21
	4.8.8	Mitigation Measures.....	4.8-22
	4.8.9	Level of Significance After Mitigation.....	4.8-22
4.9		Hydrology and Water Quality.....	4.9-1
	4.9.1	Relevant Programs and Regulations.....	4.9-1
	4.9.2	Existing Conditions	4.9-6
	4.9.3	Thresholds of Significance.....	4.9-13
	4.9.4	General Plan Goals and Policies.....	4.9-14
	4.9.5	Standard Conditions of Approval.....	4.9-16
	4.9.6	Environmental Impacts	4.9-17
	4.9.7	Cumulative Impacts	4.9-27
	4.9.8	Mitigation Measures.....	4.9-28
	4.9.9	Level of Significance After Mitigation.....	4.9-28
4.10		Land Use and Planning	4.10-1
	4.10.1	Relevant Policies and Regulations	4.10-1
	4.10.2	Existing Conditions	4.10-6
	4.10.3	Thresholds of Significance.....	4.10-7
	4.10.4	General Plan Goals and Policies.....	4.10-7
	4.10.5	Standard Conditions of Approval.....	4.10-15
	4.10.6	Environmental Impacts	4.10-16
	4.10.7	Cumulative Impacts	4.10-35
	4.10.8	Mitigation Measures.....	4.10-36
	4.10.9	Level of Significance After Mitigation.....	4.10-37
4.11		Mineral Resources	4.11-1
	4.11.1	Relevant Policies and Regulations	4.11-1
	4.11.2	Existing Conditions	4.11-2
	4.11.3	Thresholds of Significance.....	4.11-4
	4.11.4	General Plan Goals and Policies.....	4.11-5
	4.11.5	Standard Conditions of Approval.....	4.11-6
	4.11.6	Environmental Impacts	4.11-6
	4.11.7	Cumulative Impacts	4.11-8
	4.11.8	Mitigation Measures.....	4.11-8
	4.11.9	Level of Significance After Mitigation.....	4.11-8
4.12		Noise	4.12-1
	4.12.1	Relevant Policies and Regulations	4.12-2
	4.12.2	Existing Conditions	4.12-6
	4.12.3	Thresholds of Significance.....	4.12-13
	4.12.4	General Plan Goals and Policies.....	4.12-13
	4.12.5	Standard Conditions of Approval.....	4.12-15
	4.12.6	Environmental Impacts	4.12-16
	4.12.7	Cumulative Impacts	4.12-27
	4.12.8	Mitigation Measures.....	4.12-78
	4.12.9	Level of Significance After Mitigation.....	4.12-30

4.13	Population, Housing, and Employment	4.13-1
	4.13.1 <i>Relevant Policies and Regulations</i>	4.13-1
	4.13.2 <i>Existing Conditions</i>	4.13-3
	4.13.3 <i>Thresholds of Significance</i>	4.13-8
	4.13.4 <i>General Plan Goals and Policies</i>	4.13-8
	4.13.5 <i>Standard Conditions of Approval</i>	4.13-10
	4.13.6 <i>Environmental Impacts</i>	4.13-10
	4.13.7 <i>Cumulative Impacts</i>	4.13-14
	4.13.8 <i>Mitigation Measures</i>	4.13-15
	4.13.9 <i>Level of Significance After Mitigation</i>	4.13-15
4.14	Public Services	4.14-1
	4.14.1 <i>Relevant Policies and Regulations</i>	4.14-1
	4.14.2 <i>Existing Conditions</i>	4.14-1
	4.14.3 <i>Thresholds of Significance</i>	4.14-5
	4.14.4 <i>General Plan Goals and Policies</i>	4.14-5
	4.14.5 <i>Standard Conditions of Approval</i>	4.14-8
	4.14.6 <i>Environmental Impacts</i>	4.14-9
	4.14.7 <i>Cumulative Impacts</i>	4.14-11
	4.14.8 <i>Mitigation Measures</i>	4.14-12
	4.14.9 <i>Level of Significance After Mitigation</i>	4.14-12
4.15	Parks and Recreation	4.15-1
	4.15.1 <i>Relevant Policies and Regulations</i>	4.15-1
	4.15.2 <i>Existing conditions</i>	4.15-2
	4.15.3 <i>Thresholds of Significance</i>	4.15-4
	4.15.4 <i>General Plan Goals and Policies</i>	4.15-5
	4.15.5 <i>Standard Conditions of Approval</i>	4.15-7
	4.15.6 <i>Environmental Impacts</i>	4.15-8
	4.15.7 <i>Cumulative Impacts</i>	4.15-12
	4.15.8 <i>Mitigation Measures</i>	4.15-12
	4.15.9 <i>Level of Significance After Mitigation</i>	4.15-12
4.16	Transportation/Traffic	4.16-2
	4.16.1 <i>Relevant Policies and Regulations</i>	4.16-2
	4.16.2 <i>Existing Conditions</i>	4.16-8
	4.16.3 <i>Thresholds of Significance</i>	4.16-12
	4.16.4 <i>General Plan Goals and Policies</i>	4.16-12
	4.16.5 <i>Standard Conditions of Approval</i>	4.16-23
	4.16.6 <i>Environmental Impacts</i>	4.16-25
	4.16.7 <i>Cumulative Impacts</i>	4.16-32
	4.16.8 <i>Mitigation Measures</i>	4.16-33
	4.16.9 <i>Level of Significance After Mitigation</i>	4.16-33
4.17	Utilities and Service Systems	4.17-1
	4.17.1 <i>Relevant Policies and Regulations</i>	4.17-1
	4.17.2 <i>Existing Conditions</i>	4.17-4
	4.17.3 <i>Thresholds of Significance</i>	4.17-10
	4.17.4 <i>General Plan Goals and Policies</i>	4.17-11
	4.17.5 <i>Standard Conditions of Approval</i>	4.17-17
	4.17.6 <i>Environmental Impacts</i>	4.17-18
	4.17.7 <i>Cumulative Impacts</i>	4.17-23
	4.17.8 <i>Mitigation Measures</i>	4.17-24
	4.17.9 <i>Level of Significance After Mitigation</i>	4.17-24

5.0	Alternatives to the Proposed Project	5-1
5.1	Introduction.....	5-1
	5.1.1 <i>Project Summary</i>	5-1
	5.1.2 <i>Project Objectives</i>	5-2
	5.1.3 <i>Significant and Unavoidable Impacts</i>	5-2
	5.1.4 <i>Alternatives to the Proposed Project</i>	5-3
5.2	Alternatives Eliminated From Detailed Consideration.....	5-3
	5.2.1 <i>Alternative Site</i>	5-3
5.3	Alternatives Carried Forward for Detailed Consideration.....	5-3
	5.3.1 <i>Alternative 1: No Project/No Development Alternative</i>	5-4
	5.3.2 <i>Alternative 2: No Project/Existing General Plan Alternative</i>	5-7
	5.3.3 <i>Alternative 3: Alternative Land Use Plan</i>	5-11
5.4	Environmentally Superior Alternative.....	5-14
6.0	Long-term Implications of the Proposed Project	6-1
6.1	Any Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented.....	6-1
6.2	Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented.....	6-1
6.3	Growth-Inducing Impacts of the Proposed Action.....	6-2
7.0	List of EIR Preparers and Contributors	7-1
7.1	EIR Preparers.....	7-1
	7.1.1 <i>City of Rancho Cucamonga</i>	7-1
	7.1.2 <i>BonTerra Consulting</i>	7-1
7.2	Contributors.....	7-1
	7.2.1 <i>Hogle Ireland</i>	7-1
	7.2.2 <i>Mestre Greve Associates</i>	7-2
	7.2.3 <i>Kunzman Associates</i>	7-2
	7.2.4 <i>Chattel Architecture, Planning & Preservation</i>	7-2
	7.2.5 <i>Cucamonga Valley Water District</i>	7-2
	7.2.6 <i>Inland Empire Utilities Agency</i>	7-2
	7.2.7 <i>The Mobility Group</i>	7-2
8.0	List of References	7-1

TABLES

<u>Table</u>		<u>Page</u>
3-1	General Plan Buildout Summary.....	3-4
3-2	Comparison of Existing General Plan to Proposed General Plan.....	3-4
3-3	Buildout Summary By Land Use.....	3-6
3-4	Residential Land Use Summary.....	3-7
3-5	Non Residential Land Use Summary.....	3-8
4-1	SCAG Regional Growth Projections Used in Cumulative Impact Analysis SCAG.....	4-3
4-2	Geographic Scope of Cumulative Impact Analysis.....	4-4
4.1-1	Beautification Master Plans.....	4.1-3
4.2-1	Existing Farmland Resources.....	4.2-4
4.3-1	National and California Ambient Air Quality Standards.....	4.3-2
4.3-2	SCAB Attainment Designations.....	4.3-10
4.3-3	Upland and Fontana-Arrow Highway Monitoring Stations Air Quality Data (2006–2008).....	4.3-12

4.3-4	SCAQMD Air Quality Significance Thresholds.....	4.3-14
4.3-5	Estimated Maximum Daily Emissions (Pounds per Day)	4.3-31
4.4-1	Existing Vegetation Types and Other Areas in the Rancho Cucamonga Proposed General Plan Update Study Area	4.4-6
4.4-2	Special Status Plant Species Known to Occur in the Vicinity of the Rancho Cucamonga Proposed General Plan Update Study Area	4.4-16
4.4-3	Special Status Wildlife Species Known to Occur in the Vicinity of the Rancho Cucamonga Proposed General Plan Update Study Area	4.4-19
4.5-1	Top Ten CO ₂ Producing Nations Between 1990–2004	4.5-14
4.5-2	Estimated GHG Emissions.....	4.5-38
4.5-3	Example Project-Level Greenhouse Gas Reduction Measures	4.5-41
4.5-4	CAPCOA Model Policies and Proposed 2010 General Plan Update Policies.....	4.5-42
4.6-1	Archaeological Resources	4.6-7
4.6-2	California Historical Resource Status Codes	4.6-10
4.7-1	Earthquake Magnitude	4.7-6
4.7-2	Modified Mercalli Intensity Scale	4.7-9
4.7-3	Nearby Faults.....	4.7-10
4.9-1	Beneficial Uses of Receiving Waters	4.9-10
4.10-1	Land Use Designations	4.10-4
4.10-2	General Plan Land Use Designations and Development District Consistency	4.10-19
4.10-3	Adopted Specific Plans and Planned Communities	4.10-20
4.10-4	2004 Compass Blueprint Growth Vision Report Consistency Table	4.10-22
4.10-5	Voluntary Local Government Best Practices.....	4.10-24
4.11-1	Regionally Significant Aggregate Resources.....	4.11-4
4.12-1	City of Rancho Cucamonga Exterior Noise Standards	4.12-4
4.12-2	City of Rancho Cucamonga Residential Performance Standards.....	4.12-4
4.12-3	City of Rancho Cucamonga Commercial Performance Standards	4.12-5
4.12-4	City of Rancho Cucamonga Industrial Performance Standards.....	4.12-5
4.12-5	Existing Noise Measurement Locations	4.12-7
4.12-6	Existing Noise Measurements.....	4.12-8
4.12-7	Modeled Existing Roadway Noise Levels	4.12-9
4.12-8	Future 2030 With Project Traffic Noise Levels.....	4.12-18
4.12-9	Traffic Noise CNEL Increases in 2030	4.12-21
4.13-1	State Income Limits (2009) for San Bernardino County.....	4.13-2
4.13-2	Rancho Cucamonga’s Housing Allocation (2006–2014).....	4.13-3
4.13-3	Population Growth.....	4.13-4
4.13-4	Housing Stock Growth	4.13-4
4.13-5	Housing Type	4.13-5
4.13-6	Employment by Occupation	4.13-6
4.13-7	Growth Projections for Rancho Cucamonga.....	4.13-7
4.13-8	Jobs-Housing Ratio (2010–2035)	4.13-7
4.13-9	Regional Growth Projections.....	4.13-14
4.14-1	Fire Protection Facilities.....	4.14-2
4.14-2	Current Enrollment and Capacity of School Districts Serving the Study Area	4.14-3
4.14-3	Student Generation Factors	4.14-4
4.15-1	Parks and Special Use Facilities.....	4.15-3
4.15-2	Recreation Facility Needs Ratio for Rancho Cucamonga	4.15-8
4.16-1	Levels of Service.....	4.16-8
4.16-2	Existing Intersection LOS	4.16-11
4.16-3	Year 2030 Intersection LOS	4.16-28
4.17-1	Current and Planned CVWD Water Supplies (AFY)	4.17-6
4.17-2	City of Rancho Cucamonga Solid Waste Disposal Rates	4.17-10
4.17-3	Estimated Solid Waste Disposal With 2010 General Plan Update Build Out.....	4.17-22

EXHIBITS

<u>Exhibit</u>	<u>Follows Page</u>
3-1 Project Location	3-2
3-2 Aerial Photograph	3-2
3-3 General Plan Land Map	3-2
4.1-1 Entry Monuments	4.1-8
4.1-2 Roadway Treatments	4.1-8
4.1-3 Views from the I-15 Freeway	4.1-8
4.1-4 Views from the I-120 Freeway	4.1-8
4.1-5 Views of the Foothill Areas	4.1-8
4.1-6 Views of Nearby Mountains	4.1-8
4.1-7 Scenic Resources	4.1-8
4.2-1 Farmland Resources	4.2-4
4.4-1 Vegetation Types	4.4-6
4.6-1 Historic Resources	4.6-10
4.7-1 Fault Locations	4.7-6
4.7-2 Earthquake Hazard Zones	4.7-8
4.7-3 Soil Associations	4.7-12
4.7-4 Soil Erosion Hazard Area	4.7-18
4.8-1 Airspace Protection Areas	4.8-10
4.8-2 Fire Hazard Severity Zones	4.8-10
4.9-1 Major Watersheds	4.9-6
4.9-2 Groundwater Basins	4.9-8
4.9-3 Flood Hazard Zones	4.9-12
4.9-4 Dam Inundation Areas	4.9-12
4.10-1 General Plan Land Use Map	4.10-2
4.10-2 Existing Land Uses	4.10-8
4.11-1 Mineral Land Classification	4.11-2
4.11-2 Regionally Significant Aggregate Resources	4.11-4
4.12-1 Noise Measurement Locations	4.12-6
4.12-2 Typical Construction Equipment Noise Levels	4.12-18
4.14-1 Public Facilities	4.14-2
4.14-2 School District Boundaries	4.14-4
4.15-1 Hiking and Regional Trails	4.15-2
4.15-2 Parks and Special Use Facilities	4.15-2
4.15-3 Open Space and Conservation Areas	4.15-4
4.16-1 Existing Traffic Volumes	4.16-10
4.16-2 Bicycle Plan	4.16-12
4.16-3 Circulation Plan	4.16-30

APPENDICES

- A Notice of Preparation (NOP) and NOP Comment Letters
- B Air Quality Assessment
- C Plant and Animal Compendiums
- D Greenhouse Gas Assessment and Emissions Calculations
- E Cultural Resources Reports
- F Hazardous Materials Analysis
- G Noise Assessment
- H Traffic Study
- I Letter from Cucamonga Valley Water District

SECTION 1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires local government agencies to consider the environmental consequences of a project prior to taking a discretionary action related to approval or denial of the project. To support informed decision making, CEQA calls for the preparation of an Environmental Impact Report (EIR) to serve as a public disclosure document designed to provide interested members of the public, responsible/trustee agencies, special districts, and local and State governmental agency decision-makers with an analysis of the potential environmental consequences of project implementation.

This document has been prepared to identify the potential environmental effects associated with the proposed 2010 General Plan Update. A description of the proposed 2010 General Plan Update is provided in Section 1.2, Project Summary, below, and a complete project description is provided in Section 3.0, Project Description, of this document.

This EIR has been prepared as a Program EIR (PEIR), pursuant to the requirements of CEQA and the State CEQA Guidelines.

In addition to analysis of the potential environmental impacts associated with the 2010 General Plan Update, this PEIR discusses alternatives to the proposed update and includes mitigation measures that would offset, minimize, or avoid significant environmental impacts associated with future development in the City and the 2010 General Plan Update programs. Following is a summary of the proposed 2010 General Plan Update, alternatives to the proposed update, areas of controversy and issues to be resolved, potential significant adverse impacts, and recommended mitigation identified through the analysis presented in this PEIR.

1.2 PROJECT SUMMARY

1.2.1 PROJECT LOCATION

The City of Rancho Cucamonga is located in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south and east, including the cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the north and east. The northernmost portion of the City's Sphere of Influence is adjacent to the San Bernardino National Forest. Interstate and regional access to the City is provided by Interstate (I) 15, which runs in a general north-south direction and bisects the eastern portion of the City, and by State Route (SR) 210, an east-west freeway that runs through the center of the City. The I-10 freeway also provides regional access and is located approximately 0.75 mile south of the City boundary.

1.2.2 RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE

As required by State planning and zoning Law, the City of Rancho Cucamonga has developed "a comprehensive, long-term . . . plan for the physical development of the . . . City..." (*California Government Code*, Section 65300). The current Rancho Cucamonga General Plan was adopted by the City in 2001, with the Housing Element of the General Plan last updated in 2000.

The proposed 2010 General Plan Update is a comprehensive revision of the General Plan document and is intended to (1) respond to changing conditions in the City and the region and

(2) revisit the vision of the City for its future. The objectives of the proposed update are outlined in Section 3.4, Project Objectives, of this PEIR.

The 2010 General Plan Update addresses six of the seven State-mandated General Plan elements and other issues that are important to the community. The proposed 2010 General Plan Update contains the following elements (referred to as “Chapters”):

- Managing Land Use, Community Design, and Historic Resources;
- Community Mobility;
- Economic Development;
- Community Services;
- Resource Conservation;
- Public Facilities and Infrastructure; and
- Public Health and Safety.

The other State-required topic is the Housing Element, which the City is currently updating; however, this update is independent of this 2010 General Plan Update process.

Each Element contains goals and policies that the City will follow to achieve the vision of its residents, business owners, stakeholders, City staff, and leaders. In addition, the 2010 General Plan Update contains a number of programs that will implement the 2010 General Plan Update’s goals and policies. While the goals and policies serve to guide City decision making, they do not necessarily lead to impacts on their own. Strategies also direct City government operations, activities, and services but do not cause impacts. Some programs are administrative functions such as Policy PS-2.5, “Develop plans for short-term and long-term disaster recovery” that do not lead to environmental impacts, and others call for physical changes within the City such as Policy CM-1.3, “Complete the circulation system by constructing new roadway facilities and freeway interchanges pursuant to the Circulation Plan”.

Land Use Plan

Physical development in the City is regulated by the Land Use Plan in the current Rancho Cucamonga General Plan, which shows the location of allowable land uses and sets the maximum densities and intensities of development. The proposed update includes a revision of the City’s Land Use Plan. The proposed designations over the majority of the City reflect existing developments in Rancho Cucamonga and the existing land use designations in the current Land Use Plan. This means that the City intends to preserve the existing land uses and density/intensity of development in most of Rancho Cucamonga, especially its residential neighborhoods, schools, parks, and public facilities. A detailed description of the proposed land use plan is contained in Section 3.0, Project Description.

1.3 PROJECT ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines, Section 5.0 of this PEIR, Alternatives, includes a discussion of feasible alternatives to the proposed land use plan and the comparative merits of the project alternatives. This PEIR includes an evaluation of the following alternatives to the proposed 2010 General Plan Update:

- **No Project – No Development.** This alternative assumes that no development will occur in the City and existing land uses and environmental conditions will remain in

place. The No Project Alternative is not feasible due to private ownership of lands in the City and the need to allow development consistent with property rights.

- **No Project – Existing General Plan.** This alternative assumes that no update will be approved and the current General Plan would continue to regulate future development in the City. The Existing General Plan Alternative analyzes the impacts of programs and buildout under the currently adopted General Plan.
- **Alternative Land Use Plan.** This alternative assumes that a different Land Use Plan will be adopted as part of the proposed 2010 General Plan Update. The Alternative Land Use Plan considers the approval of a land use plan that avoids potentially significant and unavoidable impacts associated with the 2010 General Plan Update.

As required by CEQA, the environmentally superior alternative is identified. If the No Project Alternative is selected as environmentally superior (as is the case for the proposed 2010 General Plan Update), then the PEIR must also identify another environmentally superior alternative among the other alternatives.

The analysis in Section 5.0 of this PEIR shows that the No Project/No Development alternative could be considered superior because no new environmental impacts would be introduced to the City and its SOI. However, this alternative would not meet any of the objectives for the 2010 General Plan Update and would not incorporate new goals and policies to address historic resource preservation and sustainability.

Aside from the No Project/No Development Alternative, Alternative 3 or the Alternative Land Use Plan would also be considered environmentally superior. This alternative would avoid significant and unavoidable impacts related to aesthetics, agricultural resources, and mineral resources. However, the alternative Land Use Plan does not represent the mix of land uses and development that the residents, stakeholders, City staff and leaders envisioned at buildout of the City and SOI. It may also not provide the housing opportunities to meet demand and lifestyle choices. Thus, it does not respond to the objectives of the City for the 2010 General Plan Update to the same degree as the proposed Land Use Plan. Additionally, due to private ownership within the hillside areas, Alternative 3 would decrease development rights on existing properties thus conflicting with private ownership rights and making the alternative less desirable than the 2010 General Plan Update.

1.4 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the proposed 2010 General Plan Update, the key issues to be resolved include decisions by the City of Rancho Cucamonga, as Lead Agency, as to:

- Whether this environmental document adequately describes the environmental impacts of the proposed project;
- Whether the recommended mitigation measures should be modified and/or adopted;
- Whether the project benefits override those environmental impacts that cannot be feasibly avoided or mitigated to a level below significance;
- Whether there are other mitigation measures that should be applied besides those identified in the PEIR; and

- Whether there are any additional alternatives to the proposed 2010 General Plan Update that would substantially lessen any of the significant impacts of the update and still achieve most of the project objectives.

1.5 AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines indicates that an EIR summary should identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public. At the time of the issuance of Notice of Availability for this Draft PEIR, the following areas of controversy have been identified:

- Future hillside development has generated significant controversy related to the potential visual and biological degradation of the hillside area due to grading.
- The threat of future wildland fires to the northern areas of the City.

This PEIR has taken into consideration the comments received from the public, various agencies, and jurisdictions in response to the Notice of Preparation (NOP) and during the public scoping session held on November 23, 2009. Written comments received during the NOP comment period are contained in Appendix A. Environmental issues that have been raised during various opportunities for public input on the 2010 General Plan Update and the environmental review process are addressed in Section 2.2, PEIR Focus.

1.6 SUMMARY OF SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS

Table ES-1 summarizes the potential environmental effects of the proposed 2010 General Plan Update, applicable standard conditions and existing regulations (SCs), recommended mitigation measures (MM), and the level of significance after mitigation. As shown in Table ES-1, implementation of the 2010 General Plan Update would result in potentially significant impacts for the following topical issues:

- Aesthetics (Scenic Vistas, Visual Character and Quality, and Cumulative Impacts),
- Agriculture and Forest Resources (Farmland Resources and Cumulative Impacts),
- Air Quality (Air Quality Standards Violation and Exposure of Sensitive Resources, and Cumulative Air Quality Impacts),
- Climate Change (Greenhouse Gas Emissions and Cumulative Impacts),
- Cultural Resources (Historical Resources, Archaeological Resources, Paleontological Resources, and Cumulative Impacts),
- Hazards and Hazardous Materials (Wildland Fires),
- Hydrology and Water Quality (Water Quality and Waste Discharge, Drainage and Erosion, Surface Runoff, and Water Quality),
- Mineral Resources (Regionally Important Mineral Resources and Cumulative Impacts), and
- Noise (Noise Levels and Vibration, Airport and Airstrip Noise, and Cumulative Impacts).

Implementation of mitigation measures, as detailed in the environmental analysis in Section 4.0 of this PEIR, would reduce potentially significant adverse impacts to a less than significant level on the following issues:

- Cultural Resources (Historical Resources, Archaeological Resources, Paleontological Resources, and Cumulative Impacts),
- Hazards and Hazardous Materials (Wildland Fires),
- Hydrology and Water Quality (Water Quality and Waste Discharge, Drainage and Erosion, Surface Runoff, and Water Quality), and
- Noise (Noise Levels and Vibration, Airport and Airstrip Noise).

However, even with implementation of the goals and policies of the 2010 General Plan Update, the SCs, and the MMs, future development and redevelopment under the 2010 General Plan Update would result in significant and unavoidable impacts for the following environmental issues:

- Aesthetics (Scenic Vistas, Visual Character and Quality, and Cumulative Impacts),
- Agriculture and Forest Resources (Farmland Resources and Cumulative Impacts),
- Air Quality (Air Quality Standards Violation and Exposure of Sensitive Resources, and Cumulative Air Quality Impacts),
- Climate Change (Greenhouse Gas Emissions and Cumulative Impacts), and
- Mineral Resources (Regionally Important Mineral Resources and Cumulative Impacts).

1.7 MITIGATION MONITORING

Goals and policies that are part of the proposed 2010 General Plan Update will be the responsibility of the City to implement and monitor. SCs are existing regulations that are imposed by the City, County, State, federal agencies, or special districts and are largely the responsibility of the developer or applicant. However, the goals and policies of the 2010 General Plan Update and SCs are not considered mitigation measures under CEQA. For reference and tracking purposes, applicable SCs are Table ES-1 and will be included in the MMRP.

State law requires the preparation of a mitigation monitoring and reporting program (MMRP) to ensure that mitigation measures are implemented as part of the project to avoid or lessen significant adverse environmental effects. The mitigation measures identified in this PEIR have been developed in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation, when the mitigation would be implemented, and why the mitigation has been required. The MMRP will be provided to decision-makers under separate cover and would be adopted by the City at the time of approval of the proposed 2010 General Plan Update.

**TABLE ES-1
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
SECTION 4.1 – AESTHETICS		
<p>Scenic Vistas Future development and redevelopment could change views of the San Gabriel and San Bernardino Mountains, the foothill areas, and areas with eucalyptus windrows, scattered vineyards, and natural vegetation. Compliance with goals supporting policies in the Land Use, Community Design, and Historic Resources Element of the proposed 2010 General Plan Update and with SCs would reduce impacts ; however, a significant and unavoidable impact would occur.</p>	<p>SC 4.1-1 Future development and redevelopment within the City shall comply with the City’s Grading Ordinance, as contained in the Rancho Cucamonga Municipal Code (Title 19 Environmental Protection, of Chapter 19.04). This ordinance requires the submission of grading plans for approval by the grading committee to ensure that grading activities (1) retain the natural terrain; (2) preserve significant topographic features; and (3) limit construction on identified seismic or geologic hazard areas in the City’s hillside areas.</p> <p>SC 4.1-2 Future development and redevelopment within the City shall comply with the City’s Hillside Development Regulations, which are found in Chapter 17.08 of the Development Code. These regulations require that development within the Hillside Residential District, in the Hillside Overlay Zone, or on sites with slopes 8 percent or greater comply with the Guidelines and development standards for site design, architecture, driveways/roadways, walls and fences, landscaping, grading, drainage, trails and corrals, public safety, and development density. These regulations seek to prevent the disturbance of natural slopes.</p> <p>SC 4.1-3 In accordance with its Water Efficient Landscaping Ordinance, the City shall continue to evaluate proposed landscape and irrigation plans and to determine if they meet the requirements of the ordinance and can be approved. This ordinance will allow the establishment of landscaped areas that are visually appealing and drought resistant.</p> <p>SC 4.1-4 Future development and redevelopment within the City shall comply with the City’s Tree Preservation Ordinance in order to preserve mature trees in the City, which are considered scenic and cultural assets.</p> <p>SC 4.1-5 Future development and redevelopment within the City shall comply with the City’s Light and Glare regulations, which are found throughout the Development Code and require lighting to be directed away and shielded from adjacent residential areas. The regulations also prohibit</p>	<p>Significant and Unavoidable.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>the creation of areas with intense light or glare. As discussed above, the regulations call for the use of fences, walls, berms, screens, and landscaping to reduce light and glare spillover. The regulations are included under the special development criteria, performance standards, general design guidelines, special use regulations, and development standards for land uses in different development districts to prevent light and glare impacts on adjacent properties.</p>	
<p>Scenic Highways There are no scenic highways in or near the City, which may be affected by future development and redevelopment under the proposed 2010 General Plan Update.</p>	<p>SC 4.1-6 The Foothill Boulevard/Route 66 Visual Improvement Plan and Mural Program shall be implemented through future development and redevelopment along Foothill Boulevard to enhance the streetscape and to create a unified theme for this major corridor in the City.</p> <p>SC 4.1-7 Future development and redevelopment within the City shall comply with the City's Beautification Master Plans for designated Special Boulevards, as well as design guidelines for these Special Boulevards in existing and future specific plans.</p>	<p>No Impact.</p>
<p>Visual Character and Quality Changes in visual quality from future development and redevelopment under the proposed 2010 General Plan Update would to be significant. Compliance with goals and policies of the Land Use, Community Design, and Historic Resources Element of the proposed 2010 General Plan Update and SCs 4.1-6 through 4.1-13 would reduce impacts; however, impacts would remain significant and unavoidable.</p>	<p>SC 4.1-6 Refer to Scenic Highways, above.</p> <p>SC 4.1-7 Refer to Scenic Highways, above.</p> <p>SC 4.1-8 The Rancho Cucamonga General Plan regulates all land uses in the City. Consistency with the goals, policies and programs related to community design in the Rancho Cucamonga General Plan, as amended, shall be required for all development projects.</p> <p>SC 4.1-9 Future development and redevelopment within the City shall comply with the City's Development Code, which provides development standards and design guidelines for different development districts. Future development and redevelopment projects shall comply with applicable design guidelines in the Development Code.</p> <p>SC 4.1-10 Future development and redevelopment within the City shall comply with the City's Design Guidelines for Residential and Commercial-Industrial land uses that promote quality development in new</p>	<p>Significant and Unavoidable.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>development and redevelopment projects. These design guidelines address site planning, subdivision layout, architecture, grading, landscaping, fencing, trails, sign programs, and master planning requirements. They are used in the design review of individual development proposals that are submitted to the City for approval.</p> <p>SC 4.1-11 Future development and redevelopment within the City shall comply with the City's Sign Ordinance in order to limit the visual clutter and improve streetscapes in the City by regulating the size, color, location, number, design, lighting, and types of signs that are installed in the City.</p> <p>SC 4.1-12 As part of the City's Landscape Maintenance Districts, parkways and public landscapes in the City shall be continually maintained to enhance the City's positive visual image.</p> <p>SC 4.1-13 Future development and redevelopment within the City shall comply with the City's Wireless Communication Ordinance to avoid the visual incompatibility of communication towers and antennas with the local streetscape or with views of the City from freeways and major roadways. Siting, design, and configuration standards shall limit the number of communication towers and antennas in the City and/or screen them from public views.</p>	
<p>Light and Glare New sources of light and glare that would accompany future development and redevelopment under the proposed 2010 General Plan Update would need to comply with the City's lighting standards (SC 4.1-5) to prevent spillover onto adjacent properties prepare a lighting plan (SC 4.1-14) and maintain adequate solar easements to allow adequate sunlight (SC 4.1-15). Impacts would be less than significant.</p>	<p>SC 4.1-5 Refer to Scenic Vistas, above.</p> <p>SC 4.1-14 A detailed on-site lighting plan, including a photometric diagram, shall be reviewed and approved by the Planning Director and Police Department (477 2800) prior to the issuance of building permits. Such plan shall indicate style, illumination, location, height, and method of shielding so as not to adversely affect adjacent properties.</p> <p>SC 4.1-15 Solar access easements shall be dedicated for the purpose of assuming that each lot or dwelling unit shall have the right to receive sunlight across adjacent lots or units for use of a solar energy system. The easements may be contained in a Declaration of Restrictions for</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	the subdivision which shall be recorded concurrently with the recordation of the final map or issuance of permits, whichever comes first. The easements shall prohibit the casting of shadows by vegetation, structures, fixtures, or any other object, except for utility wires and similar objects, pursuant to Development Code Section 17.08.060-G-2.	
Cumulative Impacts Future development pursuant to the 2010 General Plan Update would contribute to the cumulative loss of undeveloped land and would continue the trend of urbanization.	Refer to SCs 4.1-1 through 4.1-15, above.	Significant and Unavoidable.
SECTION 4.2 – AGRICULTURAL RESOURCES		
Farmland Resources Future development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses.	No measures are identified.	Significant and Unavoidable.
Agricultural Zoning Future development under the proposed Land Use Plan would lead to the conversion of vineyards and orchards to urban uses, but this will not create any conflict with the existing zoning, which allows agricultural uses as an interim use.	No measures are required.	No Impact.
Forest Land and Timberlands The proposed 2010 General Plan Update Study Area does not contain any forest land or timberland, nor is it zoned as such.	No measures are required.	No Impact.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Cumulative Impacts Future development in the City of Rancho Cucamonga and San Bernardino County would lead to the cumulative decrease of Important Farmland acreage and agricultural crop production value, representing a significant impact.</p>	<p>No measures are identified.</p>	<p>Significant and Unavoidable.</p>
<p>SECTION 4.3 – AIR QUALITY</p>		
<p>Air Quality Management Plan Consistency The SCAQMD's CEQA Handbook identifies two key indicators of consistency, Criterion 1 and Criterion 2. The proposed 2010 General Plan Update would be consistent with Criterion 1 and 2.</p>	<p>No measures are required.</p>	<p>No impact.</p>
<p>Air Quality Standards Violation and Exposure of Sensitive Receptors The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NOx, and increase for PM_{2.5}, PM₁₀ and SOx. The net increase in SOx emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel</p>	<p>MM 4.3-1 The City of Rancho Cucamonga shall work with the applicants of future projects to be developed under the proposed 2010 General Plan Update to implement the following measures, derived from the SCAQMD's AQMP, where feasible, in order to reduce criteria air pollutant emissions, primarily related to vehicular travel and energy. Potential measures for consideration in future projects include:</p> <ul style="list-style-type: none"> • Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides. • Provide preferential parking to high occupancy vehicles and shuttle services. • Schedule truck deliveries and pickups during off-peak hour. • Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors. • Landscape with native and/or drought-resistant species to reduce water consumption and to provide passive solar benefits. • Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure. 	<p>Significant and Unavoidable.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Particulate Matter.</p>	<ul style="list-style-type: none"> • Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations. <p>MM 4.3-2</p> <p>The City of Rancho Cucamonga has developed the following requirements for specified land uses to reduce criteria pollutant emissions. These measures shall be verified either during review of project plans and specifications. Measures to be enforced include:</p> <ul style="list-style-type: none"> • All industrial and commercial facilities shall post signs requiring that trucks shall not be left idling for prolonged periods (i.e., in excess of 10 minutes). • All industrial and commercial facilities shall designate preferential parking for vanpools. • All industrial and commercial site tenants with 50 or more employees shall be required to post both bus and Metrolink schedules in conspicuous areas. • All industrial and commercial site tenants with 50 or more employees shall be required to configure their operating schedules around the Metrolink schedule to the extent reasonably feasible. • All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters. • All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping. 	
<p>Air Quality Standards Violation and Exposure of Sensitive Receptors</p> <p>The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NOx, and increase for PM2.5, PM10 and SOx. The net increase in SOx emissions would not</p>	<p>SC 4.3-1</p> <p>All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM2.5 and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.</p> <p>MM 4.3-1</p> <p>Refer to Air Quality Management Plan Consistency, above.</p>	<p>Significant and Unavoidable.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM2.5 and PM10 would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. Implementation of applicable goals and policies, standard condition, and mitigation measures would reduce long-term criteria air pollutant emissions; however, these reductions are not quantifiable at this time. Therefore, the anticipated net increase in PM10 and PM2.5 emissions would be considered significant and unavoidable.</p>	<p>MM 4.3-2 Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-3 The City of Rancho Cucamonga shall ensure that future projects to be developed under the proposed 2010 General Plan Update implement the following construction-period measures to reduce criteria pollutant emissions, including, but not limited to, compliance with SCAQMD Rules as described below. These measures shall be verified either during review of project plans and specifications and/or during construction. Construction-period measures to be enforced include:</p> <ul style="list-style-type: none"> • All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per manufacturers' specifications. Maintenance records shall be available at the construction site for City verification. • Prior to the issuance of any grading permits, the developer shall submit Construction Plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District (SCAQMD) as well as City Planning staff. • The construction contractor shall utilize electric or clean alternative fuel-powered equipment where feasible. • The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use. • All construction equipment shall comply with SCAQMD Rules 402(Nuisance) and Rule 403 (Fugitive Dust Control). • All asphalt shall meet or exceed performance standards noted in SCAQMD Rule 1108 (Cutback Asphalt). • All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113 (Architectural Coatings). 	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	Paints and coatings shall be applied either by hand or high-volume, low-pressure spray.	
<p>Cumulative Impacts The SCAB is designated non-attainment for ozone (VOC and NOx are ozone precursors), PM10 and PM2.5. The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for VOC and NOx, resulting in a less than significant direct and cumulative impact related to emissions of ozone precursors. Estimated net emissions of PM2.5 and PM10 would result in a significant and unavoidable direct impact. Therefore, because SCAB is designated non-attainment for particulates, this significant and unavoidable direct impact would also be a significant and unavoidable cumulative impact for PM10 and PM2.5 after implementation of proposed 2010 General Plan Update goals and policies and mitigation measures, as feasible.</p>	<p>MM 4.3-1 Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-2 Refer to Air Quality Management Plan Consistency, above.</p>	Significant and Unavoidable.
<p>Odors Construction activity odors related to buildout of the proposed 2010 General Plan Update would be temporary and would not be experienced by a substantial number of people. Buildout of the proposed 2010 General Plan Update is anticipated to result in common local odors in an urban setting, such as from cooking/restaurants, gardening, and industrial land uses. The overall distribution of land uses would remain similar to the existing</p>	No measures are required.	Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>condition, wherein there are no sources of objectionable odors affecting sensitive receptors (such as residential land uses). Also, all future projects would be required to comply with CEQA, including the assessment of odor. Therefore, implementation of the proposed 2010 General Plan Update is not anticipated to result in the generation of objectionable odors affecting a substantial number of people and there would be a less than significant impact.</p>		
<p>SECTION 4.4 – BIOLOGICAL RESOURCES</p>		
<p>Special Status Species Buildout of the proposed General Plan Update Study Area has the potential to impact special status species.</p>	<p>SC 4.4-1 Special status plant and wildlife species have the potential to occur within the proposed General Plan Update Study Area. Any CEQA project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City.</p> <p>SC 4.4-2 Any project within the proposed General Plan Update Study Area that impacts a Federally listed species shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.</p> <p>SC 4.4-3</p> <p>Any project within the proposed General Plan Update Study Area that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the 2080 CEQA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed Mitigation Plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Game (CDFG), and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.</p> <p>SC 4.4-4</p> <p>To avoid conflicts with Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a pre-construction survey (or possibly multiple surveys) by a qualified biologist are recommended prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the</p>	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the CDFG and the City.</p> <p>SC 4.4-5</p> <p>To avoid conflict with Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, the Standard Condition outlined above for the Migratory Bird Treaty Act (SC 4.4-4) shall be implemented. The Migratory Bird Treaty Act mirrors the requirements for CDFG code relative to the protection of migratory birds and prohibits taking and possession of any migratory nongame bird, as designated in the Migratory Bird Treaty Act.</p>	
<p>Riparian Habitat and Jurisdictional Areas Proposed development projects within the City have the potential to impact protected wetland areas and other significant natural communities.</p>	<p>SC 4.4-6</p> <p>A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB approval requirements. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>monitoring plan; and (7) long-term preservation requirements.</p> <p>SC 4.4-7</p> <p>The Porter-Cologne Act and Sections 1600–1616 of the <i>California Fish and Game Code</i> protect “Waters of the State”. Agreements (Streambed Alteration Agreements) from the CDFG shall be required for impacts on areas within the CDFG jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFG resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFG requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFG, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.</p>	
<p>Wildlife Movement Buildout of the proposed General Plan Update Study Area has the potential to disrupt wildlife movement through the loss of open space corridors.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>
<p>Biological Resource Policies Buildout of the proposed General Plan Update Study Area has the potential to result in removal of trees and plants protected by local and County ordinances.</p>	<p>SC 4.4-8</p> <p>The County of San Bernardino’s Code of Ordinances (Title 8, Division 8, Chapter 88.01 – Plant Protection and Management) provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. Prior to the removal of a protected tree or plant within the unincorporated SOI, a removal permit shall be obtained.</p> <p>SC 4.4-9</p> <p>The City’s Tree Preservation Municipal Code (Title 19, Environmental Protection – Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine and other trees growing within the City are a natural aesthetic resource and are worthy of protection. Prior to removal of a</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	Heritage Tree within the City limits, a Tree Removal Permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code.	
<p>Habitat Conservation Plans/Natural Community Conservation Plans The General Plan Study Area is not located within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. No impact would occur.</p>	No measures required.	No Impact.
<p>Cumulative Impacts The 2010 General Plan Update Study Area is relatively isolated from other areas containing significant biological resources that would be subject to future development. Cumulative impacts would be less than significant.</p>	No measures are required.	Less Than Significant.
SECTION 4.5 – CLIMATE CHANGE		
<p>Greenhouse Gas Emissions The proposed 2010 General Plan Update would result in an estimated gross increase of GHG emissions of 556,003 MTCO_{2e} per year. Implementation of SCs, the 2010 General Plan Update goals and policies, and MMs would reduce the GHG emissions; however, emissions would not reduced to less than the 100,000 MTCO_{2e} per year threshold. The impact would be significant and unavoidable.</p>	<p>SC 4.5-1 The City of Rancho Cucamonga shall actively participate in the development of the Sustainable Communities Strategy (SCS) within San Bernardino County, being prepared by SANBAG pursuant to SB 375, and agree to comply with the requirements of the SCS, including preparation of a Climate Action Plan for the City.</p> <p>SC 4.5-2 The City of Rancho Cucamonga adopted Ordinance No. 823 (Chapter 17.42 of the Municipal Code), Water Efficient Landscaping in December 2009. This ordinance, following the requirements of AB 1881, was developed to improve both water conservation and water retention. Methods include but are not limited to (1) maximizing the use of recycled water and other water conserving technology, (2) promoting the use of low water use plants, (3) designing and managing landscapes so that water demand can be decreased, and (4) promoting public education about water conservation and efficient</p>	Significant and Unavoidable.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>water management.</p> <p>SC 4.5-3</p> <p>The City has adopted and is implementing the Green Team Sustainability Action Matrix. This program is applicable to the City's Municipal Operations and demonstrates the City's direction towards sustainability. Elements of the program that contribute to GHG emissions reduction include the following (Rancho Cucamonga 2010).</p> <p>Climate Protection</p> <ul style="list-style-type: none"> • Complete and maintain tree inventory with goal of increasing amount of trees in city. • Put City services, including permitting and class registration, online to minimize trips and paper. • Prohibit wood-burning fireplaces in new development. <p>Green Buildings</p> <ul style="list-style-type: none"> • Develop a program, goals and timeline to move City operations towards net-zero and grid neutral. • Explore LEED certification for future public buildings. • Energy Efficient Appliances, Electrical, and Mechanical Equipment Program allows for permit fee waiver for installation of energy efficient appliances and other mechanical equipment and provides for green building certification for two inspectors. ARRA funded. • Home Improvement Program Energy Efficiency Revolving Loan providing low-income residents with loans for energy efficient upgrades. <p>Energy</p> <ul style="list-style-type: none"> • Adopt a resolution requiring at least 20% of City energy electricity purchases to be renewable by 2010 and 33% by 2020. • Retrofit city red traffic signal lights with LEDs. • Retrofit green and yellow city traffic signal lights with LEDs as replacements are needed. • Design all new City buildings to maximize cost-effective energy 	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>efficiency.</p> <ul style="list-style-type: none"> • Retrofit all City facilities with energy-efficient lighting and lighting controls. • Complete an HVAC Comprehensive Study to ensure facilities' HVAC systems run at maximum efficiency. As part of this effort, replace large City building pumps and electric motors with "variable speed drives" which respond to demand, and modernize the Civic Center's system to replace the old and inefficient compressors. • Offer RCMU customers energy audits of their facilities. • Offer RCMU customers rebates for lighting retrofits, HVAC tune-up, and solar installations. • Replace gas-powered grounds maintenance mowers with electric whenever possible. • Retrofit park lighting with efficient fixtures. • Generate a baseline of City energy usage and cost; develop a plan, including goals and a timeline, to maximize energy efficiency and the use of cost-effective alternate sources of energy. • Explore additional opportunities for the use of renewable energy sources, including solar electricity, solar hot water and wind, especially near the Cajon Pass. • Research energy efficiency of City street lights (solar and LED). • Monitor developing energy efficiency technologies, including LEDs for lighting and new solar systems. <p>Water</p> <ul style="list-style-type: none"> • Install a computerized irrigation control system to manage irrigation on over 400 individual parks and landscaped parkways. • Amend code to allow use of artificial turf and encourage use at city facilities where appropriate. • Test high efficiency urinals, toilets and other fixtures and install those that are viable in all City facilities 	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>Waste Management</p> <ul style="list-style-type: none"> • Reduce amount of paper waste. Reduce number of agenda packets produced. Post financial documents online. Transition to electronic format for City Manager's Weekly. • Enact an ordinance requiring construction and demolition projects to divert 50% of waste. Require permittees to pay a diversion deposit. • Provide residents with three collection containers (recyclables, green waste, and trash). Provide programs for businesses, multi-unit residences, and school programs to meet the needs of the facilities. <p>Transportation</p> <ul style="list-style-type: none"> • Implement 4/10 work schedule to reduce employee driving. • Install electric vehicle charging stations (The City installed 21 electric vehicle charging stations in high traffic City facilities and parks, including the Civic Center and the Metrolink Train Station.) • Replace gas-powered utility carts with electric carts (15 replaced so far). • Replace City vehicles with new energy and/or fuel efficient models such as hybrid electric vehicles when replacing vehicles or increasing the City's fleet (City has 6 hybrids, and plans to acquire 22 more). • Replace diesel-powered vehicles with Compressed Natural Gas (CNG) vehicles, including street sweepers, dump trucks, heavy trucks, fire equipment, and tractors. (Anticipates all to be replaced by 2020). • Build a CNG fueling station to serve the new Green fleet. Explore options of extending access to other public agencies and public. • Utilize automatic vehicle locator (AVL) technology to optimize City vehicle routing. • Expand the partnerships with all local and regional transit and transportation agencies and other organizations to maintain and enhance local transportation options. • Partner with local transit agencies to promote use of public 	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>transportation.</p> <ul style="list-style-type: none"> • Explore employee bicycling programs. • Explore providing shuttle linking hotels, commercial centers and civic center. • Provide carpool and explore vanpool opportunities for City employees. <p>Procurement</p> <ul style="list-style-type: none"> • Use of online/electronic procurement • Fleet optimization: assisting Fleet to procure vehicles that includes providing gas efficient vehicles, replacing vehicles when needed, etc. • When opportunities arise, reconfigure office space to create better working environments, i.e., views and natural light. • Electronic bidding to reduce paper. • Develop a policy to only purchase Energy Star-rated or higher energy-efficient equipment. <p>Education</p> <ul style="list-style-type: none"> • Educate all City Employees on current and future sustainability policies. • Promote the City's green efforts to the community and other stakeholders. • Facilitate partnerships with the city's businesses to encourage the implementation of green practices. • Explore all appropriate partnerships with public agencies, school districts, utility companies, and other organizations in order to maximize sustainability education initiatives (essential partners). • Report annually on the status of the Sustainability Action Plan. <ul style="list-style-type: none"> • Develop a Recognition Program to honor local businesses and others who practice sustainability initiatives. 	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<ul style="list-style-type: none"> • Take advantage of City events to promote sustainability. <p>MM 4.5-1 The City of Rancho Cucamonga will review the proposed 2010 General Plan Update policies included in Section 4.5.4 with a goal of developing enforceable actions for reducing GHG emissions consistent with City practice and philosophy.</p> <p>MM 4.5-2 The City of Rancho Cucamonga will develop, adopt, and implement a Climate Action Plan (CAP) that incorporates and is consistent with the GHG emissions reductions goals of the State, San Bernardino County, and the SCAQMD or alternatively, the City will adopt and implement the applicable portions of a higher level CAP, such as that of San Bernardino County or SANBAG. An acceptable CAP shall include an emissions inventory; emission targets that apply at reasonable intervals through the life of the plan; enforceable GHG control measures; monitoring and reporting; and mechanisms to allow for the revision of the plan, if necessary, to stay on target, and must be adopted in a public process following environmental review, as described in CEQA Guidelines Section 15183.5.</p> <p>MM 4.5-3 The City of Rancho Cucamonga shall join the proposed Joint Powers Authority (JPA) to be called the San Bernardino Valley Clean Energy District. This JPA is being formed in response to California AB 811, and would allow property owners to finance renewable generation and energy efficiency improvements that are permanently fixed to the property owner's residential, commercial, industrial, or other real property through low-interest loans that would be repaid as an item on the property owner's property tax bill. The loans could not be used to finance the purchase or installation of appliances that are not permanently fixed to the real property.</p>	
<p>Compatibility With Plans, Policies, and Regulations The proposed 2010 General Plan Update would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>		Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
The impact would be less than significant.		
<p>Cumulative Impacts Greenhouse gas emissions would exceed the CARB de minimus threshold for transportation sources and would be cumulatively considerable.</p>	Refer to SCs 4.5-1 through 4.5-1 and MMs 4.5-1 through 4.5-1, above.	Significant and Unavoidable.
SECTION 4.6 – CULTURAL RESOURCES		
<p>Historical Resources Buildout of the proposed 2010 General Plan Update has the potential to significantly impact historical resources.</p>	<p>SC 4.6-1 If a future project pursuant to the 2010 General Plan Update contains a designated Historical Landmark, the site shall be developed and maintained in accordance with the applicable Historic Landmark Alteration Permit. Any further modifications to the site including, but not limited to, exterior alterations and/or interior alterations which affect the exterior of the buildings or structures, removal of landmark trees, demolition, relocation, reconstruction of buildings or structures, or changes to the site, shall require a modification to the Historic Landmark Alteration Permit subject to Historic Preservation Commission review and approval.</p> <p>MM 4.6-1 Prior to the issuance of grading permits for any future development within the General Plan Study Area, project applicants shall ensure that, to the maximum extent possible, direct or indirect impacts to any known properties that are deemed eligible for inclusion on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or a local designation be avoided and/or preserved consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties. Should avoidance and/or preservation not be a feasible option, a qualified architectural historian shall develop a mitigation program which may include, but not be limited to, formal documentation of the structure using historical narrative and photographic documentation, facade preservation, or monumentation. Properties are not equally significant, and some retain more significance than others. Therefore, prior to development decisions being made, a qualified architectural historian shall be retained to evaluate the circumstance regarding the property and planned development, and to make management decisions regarding documentation of the property.</p>	Less Than Significant With Mitigation.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Archaeological Resources The proposed 2010 General Plan Update has the potential to impact unknown archaeological sites.</p>	<p>MM 4.6-2 Prior to the issuance of a grading permit for any future development within the 2010 General Plan Update Study Area, the project applicant shall retain a qualified archaeologist to assess if any of the 18 known archaeological sites identified within the Study Area, or other unknown archaeological sites, may be within the proposed construction impact or buffer zone areas. To the maximum extent feasible, known archaeological sites shall be avoided through project design modifications. If avoidance is not feasible, those sites that will be impact shall be subjected to a Phase II evaluation, which may include further archival research and ethnographic research as well as subsurface testing to determine (1) the horizontal and the vertical extent of a resource; (2) the stratigraphic integrity of a resource; and (3) the density and diversity of artifactual material. The Phase II evaluation shall include a report describing the findings and recommendations for further evaluation if required.</p> <p>Should the Phase II evaluation identify a significant resource where avoidance and/or preservation are not feasible, a Phase III mitigation or data recovery phase shall be conducted. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO).</p> <p>Excavated finds shall be offered to the City of Rancho Cucamonga or its designee on a first refusal basis. If the artifacts are refused, the landowner may retain said finds if the project applicant provides written assurance that they will be properly preserved in the City of Rancho Cucamonga, unless (1) said finds are of special significance or (2) a museum in the City of Rancho Cucamonga indicates a desire to study and/or display them, in which case the items shall be donated to the City or its designees. If the project applicant provides no such assurance, the City shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Report, and the City of Rancho Cucamonga Planning Director shall make a determination as to the site's disposition based on the recommendation of the qualified archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>MM 4.6-3</p> <p>If any prehistoric archaeological resources are encountered before or during grading, the developer will retain a qualified archaeologist to monitor construction activities, to take appropriate measures to protect or preserve them for study. With the assistance of the archaeologist, the City of Rancho Cucamonga will:</p> <ul style="list-style-type: none"> • Enact interim measures to protect undesignated sites from demolition or significant modification without an opportunity for the City to establish its archaeological value. • Consider establishing provisions to require incorporation of archaeological sites within new developments, using their special qualities as a theme or focal point. • Pursue educating the public about the archaeological heritage of the area. • Propose mitigation measures and recommend conditions of approval to eliminate adverse project effects on significant, important, and unique prehistoric resources, following appropriate CEQA guidelines. • Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area. Submit one copy of the completed report, with original illustrations, to the San Bernardino County Archaeological Information Center for permanent archiving. 	
<p>Paleontological Resources</p> <p>The proposed 2010 General Plan Update has the potential to impact non-renewable paleontological resources.</p>	<p>MM 4.6-4</p> <p>If any paleontological resource (i.e. plant or animal fossils) are encountered before or during grading, the developer will retain a qualified paleontologist to monitor construction activities, to take appropriate measures to protect or preserve them for study. The paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> • Assign a paleontological monitor, trained and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full-time during the interval of earth-disturbing activities. 	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<ul style="list-style-type: none"> • Should fossils be found within an area being cleared or graded, divert earth-disturbing activities elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor should immediately divert construction and notify the monitor of the find. • Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (i.e., San Bernardino County Museum). • Submit summary report to City of Rancho Cucamonga. Transfer collected specimens with a copy to the report to San Bernardino County Museum. 	
<p>Human Remains The proposed 2010 General Plan Update has the potential to disturb unknown human remains.</p>	<p>SC 4.6-2 If human remains are discovered on-site before or during grading, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5.</p>	Less Than Significant.
<p>Cumulative Impacts Direct impacts to cultural resources are generally site specific; loss of historic resources may cumulatively contribute to the loss of historic resources throughout the region.</p>	Refer to SC 4.6-1 and MM 4.6-1, above.	Less Than Significant With Mitigation.
SECTION 4.7 – GEOLOGY AND SOILS		
<p>Seismic Hazards Future development and redevelopment under the proposed 2010 General Plan Update would be exposed to seismic hazards, including surface rupture, ground shaking, liquefaction, landslides, and seismic settlement.</p>	<p>SC 4.7-1 In accordance with the Natural Hazards Disclosure Act, agents and sellers of real property located within a designated Alquist-Priolo Earthquake Hazard Zone shall disclose to any prospective purchaser that the property is within an Earthquake Hazard Zone pursuant to the requirements of the Act.</p> <p>SC 4.7-2 In accordance with the Alquist-Priolo Earthquake Fault Zone Act, development within the designated Earthquake Fault Zone for the Red Hill Fault and Cucamonga Fault are required to prepare detailed geotechnical investigations for land subdivisions and developments of four units or more. The California Geological Survey (CGS) has developed general guidelines for fault hazard evaluations, as</p>	Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>contained in CGS Note 49. Compliance with the A P Act would reduce hazards from surface rupture along the Red Hill and Cucamonga Faults.</p> <p>SC 4.7-3 Development of projects pursuant to the proposed 2010 General Plan Update shall comply with the City's modifications to the Alquist-Priolo Earthquake Fault Zone Act that call for geotechnical investigations for all proposed structures designed for human occupancy within the expanded A-P Zones, including a zone along a splay of the Cucamonga Fault and another zone along the scarp at Red Hill. Also, geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet.</p> <p>SC 4.7-4 In accordance with the City's Building Regulations, as contained in Title 15, Buildings and Construction of the Rancho Cucamonga Municipal Code, which includes adoption of the 2007 California Building Code (CBC), all construction shall comply with the DBC and the amendments and exemptions to the CBC that the City has adopted. This Title requires site-specific investigation and establishes construction standards and inspection procedures to ensure that development does not pose a threat to public safety.</p> <p>SC 4.7-5 In hillside areas, residential developments shall be graded and constructed consistent with the standards contained in the Hillside Development Regulations Section 17.24.070.</p>	
<p>Soil Erosion Soil erosion hazards are present in the City and ground disturbance associated with the construction of new development and redevelopment projects under the proposed 2010 General Plan Update may lead to wind and water erosion.</p>	<p>SC 4.7-5 Refer to Seismic Hazards, above.</p> <p>SC 4.7-6 Development projects pursuant to the proposed 2010 General Plan Update shall comply with the City's Grading Ordinance which is contained in Title 19, Environmental Protection – Chapter 19.04 of the Rancho Cucamonga Municipal Code and requires the submission of grading plans for approval by the grading committee to ensure that grading activities retain the natural terrain; preserve significant topographic features; and limit construction on identified seismic or geologic hazard areas in the hillside areas of the City.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>SC 4.7-7 Development of projects pursuant to the proposed 2010 General Plan Update shall comply with Title 8, Health and Safety – Chapter 8.16 of the Rancho Cucamonga Municipal Code which adopts the County’s Soil Erosion Control Ordinance, as contained in Chapter 88.02 the San Bernardino County Development Code and requires individual property owners within designated soil erosion hazard areas to make reasonable efforts to prevent dust blowing from their property. Exhibit 4.7-4, Soil Erosion Hazard Area, shows the designated soil erosion hazard area in and near the City of Rancho Cucamonga. Dust-control measures are required for various ground-disturbing activities to prevent dust and debris from affecting adjacent properties during high wind conditions.</p> <p>SC 4.7-8 All future building pads shall be seeded and irrigated for erosion control. Detailed plans shall be included in the landscape and irrigation plans to be submitted for Planning Department approval prior to the issuance of building permits.</p>	
<p>Geologic Stability Future development and redevelopment would be exposed to geologic hazards in the City and the SOI, which include landslides, soil erosion, and collapsible soils.</p>	<p>SC 4.7-1 Refer to Seismic Hazards, above.</p> <p>SC 4.7-4 Refer to Seismic Hazards, above.</p> <p>SC 4.7-5 Refer to Seismic Hazards, above.</p> <p>SC 4.7-6 Refer to Soil Erosion, above.</p> <p>SC 4.7-9 A geological report shall be prepared for an individual project by a qualified engineer or geologist and submitted at the time of application for grading plan check.</p> <p>SC 4.7-10 The final grading plan, appropriate certifications and compaction reports shall be completed, submitted, and approved by the Building and Safety Official prior to the issuance of building permits.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>SC 4.7-11 A separate grading plan check submittal is required for all new construction projects and for existing buildings where improvements being proposed will generate 50 cubic yards or more of combined cut and fill. The grading plan shall be prepared, stamped, and signed by a California registered Civil Engineer.</p>	
<p>Expansive Soils No soil expansion hazards are expected in the City and geotechnical and soils investigations for individual projects will identify the soil expansion index of on-site soils that need to be considered in the design of structures and infrastructure.</p>	<p>SC 4.7-1 Refer to Seismic Hazards, above.</p> <p>SC 4.7-9 Refer to Geologic Stability, above.</p> <p>SC 4.7-12 A soils report shall be prepared by a qualified engineer licensed by the State of California to perform such work.</p>	Less Than Significant.
<p>Septic Tanks Septic tanks in areas with soil limitations area expected on sites overlain by Cieneba and Ramona soils, as found at the foothills in the SOI.</p>	<p>SC 4.7-13 As required under Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code, the installation, use and maintenance of sewage holding tanks shall be regulated by the County Division of Environmental Health Services (DEHS) so that tanks do not affect public health or safety. The DEHS is responsible for issuing permits to construct and use septic tanks, as well as to routinely inspect the tanks for proper operation. Under this regulation, if a sewage collection line becomes available to a property served by a septic tank, the property owner shall connect to the sewer line within 90 days and to abandon the septic tank in accordance with County regulations.</p> <p>SC 4.7-14 Development of projects pursuant to the proposed 2010 General Plan Update shall comply with Chapter 5 of the Santa Ana Region Basin Plan which states that the use of septic systems within the Santa Ana River watershed shall be limited to lots developed with no more than two dwelling units per acre and prohibits these systems in specific areas with water quality problems and where public sewer systems are in place.</p> <p>SC 4.7-15 For projects using septic tank facilities, written certification of acceptability, including all supportive information, shall be obtained from the San Bernardino County Department of Environmental Health</p>	Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	and submitted to the Building Official prior to the issuance of Septic Tank Permits, and prior to issuance of building permits.	
<p>Cumulative Impacts Impacts on geology by new development are not expected to be cumulatively significant because geology impacts are generally site specific.</p>	No measures are required.	Less Than Significant.
SECTION 4.8 – HAZARDS AND HAZARDOUS MATERIALS		
<p>Transport, Use, and Disposal of Hazardous Materials Development of projects pursuant to the 2010 General Plan Update would involve the transport, use, and disposal of hazardous materials. However, since future development and redevelopment would comply with applicable hazardous materials regulations, impacts would be less than significant.</p>	<p>SC 4.8-1 Future development and redevelopment shall comply with the Hazardous Materials Transportation Act, as administered by the U.S. Department of Transportation, and which governs the transport of hazardous materials, such as contaminated soil, asbestos, or lead-containing materials. Vehicles transporting hazardous waste materials are required to comply with the regulations, as implemented by the California Department of Transportation (Caltrans).</p> <p>SC 4.8-2 Future development and redevelopment shall comply with the Resource Conservation and Recovery Act regarding the generation, transportation, treatment, storage, and disposal of hazardous waste; the management of non hazardous solid wastes; and underground tanks that store petroleum and other hazardous substances. As part of this Act, corrective action by the owner or operator of the leaking underground storage tank (LUST) or clean up of LUSTs by the USEPA would reduce hazards associated with ground and water contamination by tank leaks, spills, or accidental releases.</p> <p>SC 4.8-3 Future development and redevelopment shall comply with the California Hazardous Waste Control Act, which regulates facilities that generate or treat hazardous wastes. Permits for individual facilities allow the Department of Toxic Substances Control (DTSC) and/or the Certified Unified Program Agency (CUPA, in this case the San Bernardino County Fire Department) to inspect the facilities for compliance and to enforce the provision of the Act.</p> <p>SC 4.8-4 As the designated CUPA, the San Bernardino County Fire Department shall implement the State and Federal regulations for all future</p>	Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>development and redevelopment related to:</p> <ul style="list-style-type: none"> • Hazardous Materials Release Response Plans and Inventories (Business Plans); • California Accidental Release Prevention Program; • Underground Storage Program; • Aboveground Petroleum Storage Act Program; • Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs; and • California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements. <p>SC 4.8-5 Future development and redevelopment shall comply with the California Accidental Release Prevention Program (CalARP), which prevents the accidental release of regulated toxic and flammable substances. It does so by requiring stationary sources using hazardous materials that exceed a threshold quantity to develop and submit a Risk Management Plan that addresses the potential impacts of accidental hazardous materials releases and that includes measures to reduce hazards through prevention, response, and remediation measures.</p>	
<p>Accidental Release of Hazardous Materials Future development and redevelopment would not create a significant hazard associated with the release of hazardous materials into the environment, with compliance with existing regulations. Impacts would be less than significant.</p>	<p>SC 4.8-2 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-3 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-4 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-5 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-6 Future development and redevelopment shall comply with South Coast Air Quality Management District (SCAQMD) Rule 1403, which provides guidelines for the proper removal and disposal of asbestos containing materials. In accordance with Rule 1403, structures that</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>may contain asbestos are required to be subject to an asbestos survey by a Certified Asbestos Consultant (certified by the Occupational Safety and Health Administration [OSHA]) to identify building materials that contain asbestos. Asbestos removal should include prior notification (to the SCAQMD) and compliance with removal procedures and time schedules; asbestos handling and clean-up procedures; and storage, disposal, and land filling requirements under this rule.</p> <p>SC 4.8-7</p> <p>Future development and redevelopment shall comply with the California Code of Regulations (Title 8, Section 1532.1), which requires removal of lead based paint or other materials containing lead to be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. All demolition that could result in the release of lead must be conducted to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.</p> <p>SC 4.8-8</p> <p>Future development and redevelopment shall comply with the California Health and Safety Code (Sections 39650 et seq.) and the California Code of Regulations (Title 8, Section 1529), which prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to Federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. The standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.</p>	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Impacts to Schools Future development and redevelopment has the potential to emit hazardous emissions near school facilities. These projects would need to comply with existing regulations to prevent hazards to existing and proposed schools. Impacts would be less than significant.</p>	<p>SC 4.8-1 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-2 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-3 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-4 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-5 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p>	<p>Less Than Significant.</p>
<p>Known Hazardous Materials Future development may include facilities that would be listed in government databases. Redevelopment on sites currently listed on databases may also occur. Compliance with existing regulations would make impacts less than significant.</p>	<p>SC 4.8-2 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-3 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-4 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p> <p>SC 4.8-5 Refer to Transport, Use, and Disposal of Hazardous Materials, above.</p>	<p>Less Than Significant.</p>
<p>Airport Hazards Future development and redevelopment may occur within the two miles of the LA/Ontario International Airport. Compliance with FAA Part 77 guidelines would avoid obstructions to LA/Ontario International Airport's navigable airspace that may occur from future development and/or redevelopment in the City. Impacts would be less than significant.</p>	<p>SC 4.8-9 Future development and redevelopment shall comply with Part 77 of the Federal Aviation Regulations (FAR), which requires notification the Federal Aviation Administration (FAA) to be notified of any project that may encroach upon established navigable airspace. Once notified, the FAA is responsible for the review of site and building plans to determine the effects of proposed construction on air navigation. Measures are then identified to ensure the continued safety of air navigation. Likewise, FAA notification, review, and approval are required for any construction or alteration of a temporary or permanent structure, equipment, highway, railroad, roadway, or natural growth that:</p> <ul style="list-style-type: none"> • Is more than 200 feet in height • Extends into an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from 	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>the nearest point of the nearest runway that is 3,200 feet or longer</p> <ul style="list-style-type: none"> Extends into an imaginary surface extending outward and upward at a slope of 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway that is less than 3,200 feet long. 	
<p>Airstrip Hazards No impact related to hazards from private airstrips would occur with future development and redevelopment in the City.</p>	<p>No measures are required.</p>	<p>Less Than Significant.</p>
<p>Emergency Response Future development and/or redevelopment under the proposed 2010 General Plan Update is not expected to interfere with emergency response and evacuation, with compliance with existing Fire District regulations for access and project review. Impacts would be less than significant.</p>	<p>SC 4.8-10 The State Board of Forestry and the California Department of Forestry and Fire Protection (CDF) shall continue to implement the California Fire Plan for all Future development, redevelopment, and existing development within the City of Rancho Cucamonga or the City's Sphere of Influence, to reduce wildland fire hazards at the San Bernardino National Forest and foothills in Rancho Cucamonga.</p>	<p>Less Than Significant.</p>
<p>Wildland Fires Future development within designated wildland fire hazards at the northern end of the City and its SOI would represent a potentially significant impact related to wildland fire hazards.</p>	<p>SC 4.8-10 Refer to Emergency Response, above.</p> <p>SC 4.8-11 The City shall implement its Fire Protection District Strategic Plan to increase fire protection and emergency services in the northern end of the City. The Strategic Plan calls for continued efforts to assess and identify high risk areas in the community, development of seasonal programs to communicate the mitigation program goals and objectives to the public, development of fuel modification/brush abatement programs, and a gates and lock access program. The District's Wildland Fire Team shall continue to hone their skills on wildland firefighting techniques, as well as test preparation plans and inter-department communications.</p> <p>SC 4.8-12 Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbecues and grills, and firebreak fuel modification areas are imposed on new developments.</p> <p>MM 4.8-1</p> <p>Future development and redevelopment shall comply with Chapter 7A of the California Building Code (CBC), which includes building standards for the Wildland-Urban Interface Fire Area. The standards call for the use of ignition-resistant materials and design to inhibit the intrusion of flame or burning embers projected by a vegetation fire and help reduce losses resulting from repeated cycles of interface fire disasters. These standards shall apply to the areas within the designated Very High Fire Hazard Severity Zone at the northern end of the City and Sphere of Influence (SOI).</p>	
<p>Cumulative Impacts Future development and/or redevelopment in the City and in the rest of the County would increase hazards as more facilities or operations use hazardous materials; are located near airports; and are developed in hillside areas in Very High Fire Hazard Severity Zones. However, these impacts would be largely site-specific and would not represent a significant, cumulative impact.</p>	<p>No measures are required.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.9 – HYDROLOGY AND WATER QUALITY</p>		
<p>Water Quality and Waste Discharge Standards Future development and redevelopment have the potential to generate pollutants that could enter the storm drainage system and affect water quality at local and regional creeks and the Santa Ana River. Implementation of BMPs in the SWPPP and a WQMP for individual</p>	<p>SC 4.9-1</p> <p>Chapter 19.20 of the Rancho Cucamonga Municipal Code is the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance, which provides regulations to comply with the CWA, the California Water Quality Control Act, and the City's NPDES permit. This ordinance prohibits the discharge of specific pollutants into the storm water; regulates connections to the storm drain system; and requires development projects to implement permanent BMPs on individual sites to reduce pollutants in the storm water.</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>projects, and compliance with pertinent Santa Ana RWQCB regulations, the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance, and Policy RC-2.7 and implementation of applicable mitigation would reduce impacts to less than significant levels.</p>	<p>SC 4.9-2 The Santa Ana RWQCB implements the Water Quality Control Plan for the Santa Ana River Basin through the through issuance of individual WDRs; discharge prohibitions; water quality certifications; programs for salt management, non-point sources, and storm water; and monitoring and regulatory enforcement actions, as necessary. Individual developments are required to obtain water quality certifications and/or WDRs and comply with the discharge prohibitions, TMDLs, and various programs of the Board.</p> <p>MM 4.9-1 Prior to issuance of grading permits, the permit applicant shall submit to Building Official for approval, Storm Water Pollution Prevention Plan (SWPPP) specifically identifying Best Management Practices (BMPs) that shall be used on-site to reduce pollutants during construction activities entering the storm drain system to the maximum extent practicable.</p> <p>MM 4.9-2 Prior to issuance of grading or paving permits, applicant shall obtain a Notice of Intent (NOI) to comply with obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit from the State Water Resources Control Board. Evidence that this has been obtained (i.e., a copy of the Waste Discharger's Identification Number (shall be submitted to the City Building Official for coverage under the NPDES General Construction Permit.</p> <p>MM 4.9-3 Prior to issuance of building permits, the applicant shall submit to the City Engineer for approval of a Water Quality Management Plan (WQMP), including a project description and identifying Best Management Practices (BMPs) that will be used on-site to reduce pollutants into the storm drain system to the maximum extent practicable. The WQMP shall identify the structural and non-structural measures consistent with the current Guidelines for New Development and Redevelopment adopted by the City of Rancho Cucamonga.</p> <p>MM 4.9-4 The developer shall implement the BMPs identified in the Water Quality Management Plan prepared by (name/date) to reduce</p>	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	pollutants after construction entering the storm drain system to the maximum extent practical.	
<p>Groundwater Future development and redevelopment would not directly impact local groundwater resources, and the increase in demand for groundwater resources at buildout is not expected to result in significant adverse impacts with implementation of applicable regulations and policies, and CVWD water conservation programs. No mitigation is required.</p>	<p>SC 4.9-3 In compliance with the terms of the adjudications for the Chino and Cucamonga Groundwater Basins, the CVWD and other participating entities shall pump groundwater according to their prescriptive water rights as managed by the Chino Basin Watermaster.</p>	<p>Less Than Significant.</p>
<p>Drainage and Erosion Changes in drainage patterns would be largely confined to individual development sites and no substantial erosion or siltation impacts would be reduced to less than significant levels with adherence to applicable 2001 General Plan Update policies and applicable regulation as well as implementation of MMs.</p>	<p>SC 4.9-4 The City's Floodplain Management Regulations (Chapter 19.12 of the Rancho Cucamonga Municipal Code) require all structures and land uses within the designated floodplains to be reasonably safe from flooding and not increase the base flood by more than one foot where base flood elevations have been determined but a floodway has not been designated. This is accomplished by the implementation of flood hazard reduction measures, which would include anchoring; flood-resistant materials; drainage around structures; elevation of lowest floor above base flood elevation; floodproofing; elimination of infiltration of floodwater or discharges from water and sewer lines; prohibition of floodway encroachment; and mobile home and recreational vehicle standards. MM 4.9-1</p> <p>MM 4.9-2 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MM 4.9-5 An Erosion Control Plan shall be prepared, included in the Grading Plan, and implemented for the proposed project that identifies specific measures to control on-site and off-site erosion from the time ground disturbing activities are initiated through completion of grading. This Erosion Control Plan shall include the following measures at a minimum: a) Specify the timing of grading and construction to minimize soil exposure to rainy periods experienced in Southern California, and b) An inspection and maintenance program shall be included to ensure that any erosion which does occur either on-site or</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	off-site as a result of this project will be corrected through a remediation or restoration program within a specified time frame.	
<p>Drainage Patterns Less than significant impacts related to the alteration of the course of a stream or river would occur from future development and redevelopment pursuant to the proposed General Plan; no mitigation is required.</p>	No measures are required.	Less Than Significant.
<p>Surface Runoff Significant impacts from increase in runoff volumes and rates would occur from future development and redevelopment under the proposed 2010 General Plan Update in terms of flooding or the capacities of downstream drainage systems. Compliance with SCs, goals and policies, and applicable mitigation would reduce impacts to less than significant levels.</p>	<p>SC 4.9-1 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>SC 4.9-5 Storm drainage system improvements in the City are constructed in accordance with the Master Plan of Drainage-Westside Area and the Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage. These drainage master plans address the flood control needs of a fully developed drainage area and identify the regional and local facilities needed to adequately convey a 100-year storm event. Storm drainage system improvements in other areas of the City are constructed in accordance with the storm drain plan in the applicable Specific Plan or Community Plan. Buildout of the proposed 2010 General Plan Update shall comply with the applicable drainage master plans.</p> <p>SC 4.9-6 The Santa Ana River Mainstream Project will provide increased flood protection to the communities within Orange, San Bernardino and Riverside Counties by constructing structural improvements at dams, levees, creeks, street drains, and the Santa Ana River; restoring marshland; and protecting canyon areas. Implementation of this project is being coordinated between the flood control districts of the three counties (as local sponsors) and the USACE. The City of Rancho Cucamonga shall continue coordination and cooperation with the USACE and local sponsors for the ongoing implementation of this project.</p> <p>SC 4.9-7 A final drainage study shall be submitted to and approved by the City Engineer prior to final map approval or the issuance of building</p>	Less Than Significant With Mitigation.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>permits, whichever occurs first. All drainage facilities shall be installed as required by the City Engineer.</p> <p>SC 4.9-8 Adequate provisions shall be made for acceptance and disposal of surface drainage entering the property from adjacent areas.</p> <p>SC 4.9-9 The San Bernardino County Department of Public Works owns and maintains the channelized creeks, debris basins, levees, and spreading grounds located in and north of the City, which reduce storm water flows in canyons and flood hazards. Buildout of the proposed 2010 General Plan Update shall be subject to the County's ongoing maintenance of debris basins, channels, and spreading grounds reduces hazards associated with flooding, mudflow, and debris flows from the mountains (Eke 2009).</p> <p>MMs 4.9-4 Refer to Water Quality and Waste Discharge Standards, above.</p>	
<p>Water Quality Discharges from future development and redevelopment under the proposed 2010 General Plan Update, if unmitigated, would contribute to the continued impairment of Prado Park Lake at the Santa Ana River, Mill Creek, Reach 3 of the Santa Ana River, and Reach 1 of Cucamonga Creek. Adherence to applicable policies and SCs and implementation of MMs would reduce the potential impact related to water quality to a less than significant level.</p>	<p>SC 4.9-1 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>SC 4.9-2 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MMs 4.9-1 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MMs 4.9-2 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MMs 4.9-3 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MMs 4.9-4 Refer to Water Quality and Waste Discharge Standards, above.</p> <p>MM 4.9-6 During construction, temporary berms such as sandbags or gravel dikes must be used to prevent discharge of debris or sediment from the site when there is rainfall or other runoff.</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>MM 4.9-7 During construction, to remove pollutants, street cleaning will be performed prior to storm events and after the use of water trucks to control dust in order to prevent discharge of debris or sediment from the site.</p> <p>MM 4.9-8 Landscaping plans shall include provisions for controlling and minimizing the use of fertilizers/pesticides/herbicides. Landscaped areas shall be monitored and maintained for at least two years to ensure adequate coverage and stable growth. Plans for these areas, including monitoring provisions for a minimum of two years, shall be submitted to the City for review and approval prior to the issuance of grading permits.</p>	
<p>Flood Hazards: Housing Future residential development and redevelopment may be located in the designated 100-year floodplain. Compliance with the City's Floodplain Management Regulations and construction of the necessary local storm drain infrastructure and improvements of the regional storm drainage facilities would prevent any significant adverse impacts related to the placement of housing within a 100-year flood hazard area; no mitigation is required.</p>	<p>SC 4.9-4 Refer to Drainage and Erosion, above.</p> <p>SC 4.9-5 Refer to Surface Runoff, above.</p> <p>SC 4.9-6 Refer to Surface Runoff, above.</p>	<p>Less Than Significant.</p>
<p>Flood Hazards: Structures Structures built as part of future development and redevelopment under the proposed 2010 General Plan Update could impede or redirect flood flows. Impacts would be less than significant with compliance with the City's Floodplain Management Regulations.</p>	<p>SC 4.9-4 Refer to Drainage and Erosion, above.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Flood Hazards: Dam Inundation The City is located within the dam inundation area of San Antonio Dam and several debris basins and hazards from dam inundation would affect future development and redevelopment proposed in these areas. Impacts associated with flooding due to dam or levee failure and inundation by seiche or mudflow would be less than significant with compliance with existing regulations.</p>	<p>SC 4.9-4 Refer to Drainage and Erosion, above.</p> <p>SC 4.9-9 Refer to Surface Runoff, above.</p> <p>SC 4.9-10 The proposed 2010 General Plan Update shall comply with requirements set forth by the USACE in the Emergency Action and Notification Subplan for the San Antonio Dam, which identifies actions and responsibilities for warning, evacuation, and post-disaster recovery that will be followed in the event of dam failure.</p>	<p>Less Than Significant.</p>
<p>Cumulative Impacts. Future development and redevelopment pursuant to the 2010 General Plan Update would be consistent with all applicable regulations related to water quality and hydrology; therefore, the 2010 General Plan Update would not result in a cumulatively significant impact.</p>	<p>Refer to SCs 4.9-1 through 4.9-10, above.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.10 – LAND USE AND PLANNING</p>		
<p>Established Communities Implementation of the proposed 2010 General Plan Update would lead to changes in existing land uses on scattered lots in the City through the development of vacant lots and the redevelopment of underutilized parcels. However, the proposed 2010 General Plan Update calls for the preservation of the established residential neighborhoods and the majority of existing developments in the Land Use Plan. No established communities will be divided by the proposed 2010 General Plan Update or future development and redevelopment under the proposed</p>	<p>No measures are required.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>2010 General Plan Update. Impacts would be less than significant; no mitigation is required.</p>		
<p>Plan Consistency Conflict with the current Rancho Cucamonga General Plan and Development Code is mainly due to a change in the City's vision for its future. This does not represent an adverse impact, since the proposed 2010 General Plan Update will supersede the current Plan and the Development Code will be amended as part of the 2010 General Plan Update. No conflict with the Rancho Redevelopment Project, SCAG's Compass Blueprint, or SCAG's Regional Comprehensive Plan is expected with the proposed 2010 General Plan Update. Although no significant impact is expected, adherence to applicable SCs as well as implementation of MM 4.10-1 would ensure that future development would be consistent with related planning documents.</p>	<p>SC 4.10-1 As the primary land use policy document for the City, the Rancho Cucamonga General Plan regulates all future development and redevelopment in the City. All future development projects must be consistent with the goals, policies and programs of the 2010 General Plan Update, as amended.</p> <p>SC 4.10-2 The City's Development Code provides development standards and design guidelines for the development or redevelopment of individual parcels in the City. Future development and redevelopment projects shall be required to comply with pertinent zoning regulations.</p> <p>MM 4.10-1 The City of Rancho Cucamonga Planning Department shall monitor all development that takes place within the Study Area against the projected target densities detailed in Tables LU-16, LU-17, and LU-18 of the proposed 2010 General Plan Update. As buildout of the proposed 2010 General Plan Update approaches 80 percent of the total additional development allowed, the City of Rancho Cucamonga shall initiate environmental analysis to address full buildout of the proposed 2010 General Plan Update or prepare an update to the General Plan to be completed prior to reaching the established target densities herein.</p>	<p>Less Than Significant.</p>
<p>Habitat Conservation Plan/Natural Community Conservation Plan There is no applicable habitat conservation plan or natural community conservation plan in the City of Rancho Cucamonga. Thus, the proposed 2010 General Plan Update proposed General Plan would not conflict with any habitat conservation plan or natural community conservation plan. No impacts are expected.</p>	<p>No measures are required.</p>	<p>No Impact.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Cumulative Impacts. The development of vacant lands and development trends in the surrounding area are not expected to result in cumulative land use impacts.</p>	<p>No measures are required.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.11 – MINERAL RESOURCES</p>		
<p>Regionally Important Mineral Resources Future development under the proposed General Plan Update would preclude mining operations, resulting in the loss of availability of a known mineral resource in areas planned for Hillside Residential development.</p>	<p>No measures identified.</p>	<p>Significant and Unavoidable.</p>
<p>Locally Important Mineral Resources Future development under the 2010 General Plan Update would preclude mining operations in a few areas planned for Hillside Residential development; however, impacts related to the loss of locally important resources, such as sand and gravel, are expected to be less than significant.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>
<p>Cumulative Impacts Future development and redevelopment pursuant to the 2010 General Plan Update would contribute to a cumulative demand and loss of construction aggregates in the region.</p>	<p>No measures identified.</p>	<p>Significant and Unavoidable.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
SECTION 4.12 – NOISE		
<p>Noise Levels and Vibration Construction activities associated with development pursuant to the 2010 General Plan Update would result in temporary increases in ambient noise levels during the various stages of construction and would have the potential to expose persons to noise levels in excess of standards established in the City’s Noise Ordinance. However, compliance with applicable SCs and implementation of MMs would reduce construction noise impacts to less than significant levels.</p> <p>Vibration may be noticeable for short periods during construction, but it would be temporary and periodic and would not be excessive; vibration would not be a significant impact.</p> <p>Future development and redevelopment under the proposed 2010 General Plan Update would lead to increases in noise levels that would affect residential uses and noise sensitive receptors. Implementation of MMs would reduce impacts to less than significant.</p>	<p>SC 4.12-1 Prior to approval of grading plans and/or prior to issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall not occur between the hours of 8:00 PM and 6:30 AM and on Sundays and national holidays. This requirement is identified under item 4 of the Special Provisions paragraph in Chapter 17.02.120 of the Municipal Code.</p> <p>SC 4.12-2 Future development and redevelopment in the City shall comply with Section 17.02.120 of the City of Rancho Cucamonga’s Municipal Code, which sets limits for interior and exterior noise levels.</p> <p>SC 4.12-3 Future development and redevelopment in the City shall comply with Title 24 of the California Administrative Code, which requires that residential structures (other than detached single-family dwellings) be designed such that the interior community noise equivalent level (CNEL) with windows closed shall not exceed 45 A-weighted decibels (dBA) in any habitable room.</p> <p>MM 4.12-1 Prior to the issuance of any grading plans, the City shall condition approval of subdivisions that are adjacent to any developed/occupied noise sensitive land uses by requiring applications to submit a construction-related noise mitigation plan to the City for review and approval. The Plan shall depict the location of the construction equipment and how the noise from this equipment would be mitigated during construction of the project.</p> <p>MM 4.12-2 Construction or grading noise levels shall not exceed the standards specified in Development Code Section 17.02.120-D, as measured at the property line. Developer shall hire a consultant to perform weekly noise level monitoring as specified in Development Code Section 17.02.120. Monitoring at other times may be required by the Building Official. Said consultant shall report their findings to the Building Official within 24 hours; however, if noise levels exceed the above standards, then the consultant shall immediately notify the Building Official. If noise levels exceed the above standards, then construction</p>	<p>Less Than Significant With Mitigation.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>activities shall be reduced in intensity to a level of compliance with the City's noise standards or construction halted.</p> <p>MM 4.12-3</p> <p>The construction-related noise mitigation plan required as part of the previous noise mitigation measure shall specify that haul truck deliveries be subject to the same hours specified for construction equipment (i.e., Monday through Saturday, 6:30 AM and 8:00 PM and not allowed on Sundays and national holidays). Additionally, the plan shall denote any construction traffic haul route where heavy trucks would exceed 100 daily trips (counting those both to and from the construction site). To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings. The construction-related noise mitigation plan shall also incorporate any other restrictions imposed by City staff.</p> <p>MM 4.12-4</p> <p>If a perimeter block wall is required for a project, the wall shall be constructed as early as possible during the first phase of construction.</p> <p>MM 4.12-5</p> <p>Applicants for new proposed land uses shall specify increased setbacks such that land uses do not lie within the 65 dBA CNEL overlay zone for commercial, office and sensitive uses (60 dBA CNEL for residential use). This would ensure that proposed land uses are not exposed to excessive noise from roadways, railroads and other nearby noise sources and that exterior and interior noise levels do not exceed the goals of the 2010 General Plan Update Public Health and Safety Chapter and the City's noise standards. If increased setbacks are not provided, an applicant may provide barriers between the noise source and the proposed development; site design that reduces the noise levels at exterior living areas; and/or sound insulation or specialized construction methods to block out exterior noise.</p> <p>Prior to the Development Application CEQA review, a developer shall contract for a site-specific noise study for the specific project that identifies existing and projected noise levels and measures to maintain noise levels within City standards. The noise study shall be performed by an acoustic consultant experienced in such studies and the consultant's qualifications and methodology to be used in the study must be presented to City staff for consideration.</p> <p>The final acoustical report shall be submitted for Planning Director</p>	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>review and approval prior to the issuance of building permits. The report shall discuss the level of interior noise attenuation to below 45 dBA CNEL, the building materials and construction techniques provided, and if appropriate, verify the adequacy of the mitigation measures. The building plans will be checked for conformance with the mitigation measures contained in the report.</p> <p>The applicant shall submit certification from an acoustical engineer that all recommendations of the acoustical report were implemented in construction, including measurements of interior and exterior noise levels to document compliance with City standards. Certification shall be submitted to the Building & Safety Department prior to final occupancy release of the affected homes.</p> <p>Noise levels shall be monitored after construction to verify the adequacy of the mitigation measures, with noise levels monitored by actual noise level readings taken on- and off-site.</p> <p>A final acoustical report shall be submitted for Planning Director review and approval prior to final occupancy release. The final report shall make a determination that the mitigation measures have reduced noise levels to below City standards, such as, residential exterior noise levels to below 60 dBA and interior noise attenuation to below 45 dBA.</p> <p>MM 4.12-6</p> <p>No industrial facilities shall be constructed within 500 feet of any commercial land uses or within 2,800 feet of any residential land uses without preparation of a noise analysis. This analysis shall document the nature of the industrial facility, as well as noise producing operation associated with the facility. Noise control measures shall be incorporated into the development of the facility to ensure compliance with the City's noise standards.</p> <p>MM 4.12-7</p> <p>Restrictions on commercial, industrial and other non-residential activities shall be imposed by the City, so as not to create any noise that would exceed exterior and interior noise standards. This may include restrictions on business operations to maintain noise levels at 60 dB or less during the hours of 10 PM until 7 AM and at 65 dB or less during the hours of 7 AM until 10 PM; establishment of set hours of operation; and regulations on loading and unloading activities such that no person shall cause the loading, unloading, opening, closing, or</p>	

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	other handling of boxes, crates, containers, building materials, garbage cans, or other similar objects between the hours of 10 PM and 7 AM unless otherwise specified herein, in a manner which would cause a noise disturbance to a residential area.	
<p>Airport and Airstrip Noise Development associated with buildout of the 2010 General Plan Update Study Area could expose people residing or working in the southern edge of the City to excessive noise levels from airport operations. Implementation of MM 4.12-8 would reduce noise exposure to airport and aircraft noise to less than significant levels.</p>	<p>MM 4.12-8 Residential developments and redevelopments at the southern edge of the City shall prepare an acoustical study to determine site exposure to airport noise and identify noise control measures that would be incorporated into the project to achieve compliance with the City's interior and exterior noise standards for residential uses. These noise control measures may include locating outdoor living areas at the northern section of the site or north of the proposed structure; enclosed common recreational areas; provision of a wall, berm or other barrier to the noise source; and sound insulation or specialized construction methods to block out exterior noise.</p> <p>The acoustical report shall be submitted for Planning Director review and approval prior to the issuance of building permits. The report shall discuss the level of interior noise attenuation to below 45 CNEL, the building materials and construction techniques provided, and if appropriate, verify the adequacy of the mitigation measures. The building plans will be checked for conformance with the mitigation measures contained in the report.</p> <p>The applicant shall submit certification from an acoustical engineer that all recommendations of the acoustical report were implemented in construction, including measurements of interior and exterior noise levels to document compliance with City standards. Certification shall be submitted to the Building & Safety Department prior to final occupancy release of the affected homes.</p> <p>Noise levels shall be monitored after construction to verify the adequacy of the mitigation measures, with noise levels monitored by actual noise level readings taken on- and off-site.</p>	Less Than Significant With Mitigation.
<p>Cumulative Impacts Future development and redevelopment in the City and surrounding areas would add new mobile and stationary noise sources, resulting in increased noise levels in excess of City standards. While future development and</p>	No measures are identified.	Significant and Unavoidable.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>redevelopment would be designed to reduce their noise exposure to meet City standards, existing developments would continue to be exposed to increasing traffic noise levels exceeding City standards, thus representing a significant impact.</p>		
<p>SECTION 4.13 – POPULATION, HOUSING, AND EMPLOYMENT</p>		
<p>Population Growth The proposed 2010 General Plan Update will indirectly increase the City's population, housing stock, and employment base by providing capacity to accommodate future development. Exceedances of SCAG projections for population, households, and employment are expected, which may have the potential for a significant impact based on the rate of future development proposals and entitlements. Also, the increase in the jobs/housing ratio at buildout may create more traffic congestion. However, if these trips replace longer trips to distant job markets, regional impacts would be beneficial. Additionally, traffic impacts associated with buildout of the proposed 2010 General Plan Update are expected to be fully reduced to less than significant impact through implementation of programmed improvements as detailed in Section 4.16, Transportation/Traffic.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Displacement of Housing and People Displacement of housing and people may occur on a temporary basis as property owners elect to do on-site redevelopment or improvement projects. Due to the short-term nature of displacement, potential impacts would be less than significant.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>
<p>Cumulative Impacts Future development pursuant to the 2010 General Plan and in the County would lead to the development of new homes, the creation of new jobs, and the increase in the resident population of the City and the rest of the County. The cumulative increase in population in the County would be accompanied by an increase in housing stock; therefore, a less than significant cumulative impact would occur.</p>	<p>No measures are required.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.14 – PUBLIC SERVICES</p>		
<p>Fire Protection Development of the proposed 2010 General Plan Update would create additional demand for fire protection services, which would be funded through the City's general fund. Compliance with SC 4.14-1 would ensure that future projects are reviewed by the City prior to the issuance of building permits. Impacts would be less than significant.</p>	<p>SC 4.14-1 Prior to issuance of the first building permit for a specific project, the Property Owner/Develop shall comply with all applicable codes, ordinances and standard conditions, including the current edition of the California Fire Code and the Rancho Cucamonga Municipal Code, regarding fire prevention and suppression measures, fire hydrants, automatic fire extinguishing systems, fire access, and water availability, among other measures.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Law Enforcement Development of the proposed 2010 General Plan Update would create additional demand for police protection services which would be funded through the City's general fund or other existing funding mechanisms. Impacts would be less than significant; no mitigation is required.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>
<p>Schools Development of the proposed 2010 General Plan Update would create additional demand for schools. Compliance with SC 4.14-2 would ensure that future projects pay applicable developer's fees in compliance with SB 50. Therefore, impacts would be less than significant.</p>	<p>SC 4.14-2 Prior to the issuance of the first building permit for a specific project, the Property Owner/Developer shall pay applicable developer's fees to the impacted school district(s) pursuant to Section 65995 of the California Government Code. Under State law, payment of the developer fees provides full and complete mitigation of the project's impacts on school facilities. Evidence that these fees have been paid in compliance with Senate Bill (SB) 50 shall be submitted to the Building Department.</p>	<p>Less Than Significant.</p>
<p>Libraries Development of the proposed General Plan Update would create additional demand for library services. Compliance with applicable 2010 General Plan Update goals and policies would ensure that impacts to library services would be less than significant.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>
<p>Cumulative Impacts Future growth pursuant to the 2010 General Plan Update would create an increased demand for fire protection, law enforcement, library, and school services. All development would occur in compliance with applicable regulations; therefore, the impact would not be cumulatively considerable.</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
SECTION 4.15 – PARKS AND RECREATION		
<p>Existing Park Facilities Future residential development and redevelopment would create a demand for parks and recreational facilities, which is expected to be met by the provision of on-site recreational areas and parkland dedication/in lieu fees consistent with local laws.</p>	<p>SC 4.15.1 Implementation of the proposed General Plan Update shall comply with the City’s Development Code, which requires new residential development to provide private and common open space areas and recreational areas and facilities as part of individual projects.</p> <p>SC 4.15.2 Implementation of the proposed General Plan Update shall comply with the City’s Local Park Ordinance, as contained Chapter 16.32 (Park and Recreational Land) of the City’s Municipal Code, which requires developers of residential projects to dedicate land and/or pay in-lieu fees for the provision of parkland at a standard of 3 to 5 acres per 1,000 residents.</p>	Less Than Significant.
<p>New and Altered Park Facilities Future development of parks and recreational facilities in the City would have beneficial impacts in meeting the demands of existing and future residents. Impacts would be less than significant.</p>	<p>SC 4.15.1 Refer to Existing Park Facilities, above.</p> <p>SC 4.15.2 Refer to Existing Park Facilities, above.</p>	Less Than Significant.
<p>Park Service Ratios Future development and redevelopment would be accompanied by the development of new parks and recreational facilities pursuant to the City’s Local Parkland Ordinance. The existing parkland deficiency will be reduced through development of planned parks and trails and parks as well as recreational facilities that would accompany future residential development. A deficiency will remain at buildout due to existing deficiencies in meeting the 5.0 acres per 1,000 residents standard set by the proposed General Plan. However, service ratios and performance ratios would be</p>	<p>SC 4.15.1 Refer to Existing Park Facilities, above.</p> <p>SC 4.15.2 Refer to Existing Park Facilities, above.</p>	Less Than Significant.

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>improved by the development of planned and future parks, recreational facilities and trails. Impacts are expected to be less than significant.</p>		
<p>Cumulative Impacts Future development and redevelopment pursuant to the 2010 General Plan Update would create additional demand for parks and recreation areas; however, the City of Rancho Cucamonga as well as surrounding jurisdictions have adopted parkland dedication ordinances in accordance with the Quimby Act. Therefore, individual development projects would mitigate their incremental impact on parks and recreational facilities. This would represent a less than significant cumulative impact.</p>	<p>Refer to SCs 4.15.1 and 4.15-2, above.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.16 – TRANSPORTATION/TRAFFIC</p>		
<p>Circulation System Buildout of the proposed 2010 General Plan Update would increase traffic volumes in the City, leading to four intersections operating at LOS E or worse by 2030. Improvements at these intersections would allow them to operate at LOS D or better. Implementation of applicable SCs would ensure improvement of the roadway system to accommodate future traffic volumes. Impacts would be less than significant.</p>	<p>SC 4.16-1 Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.</p> <p>SC 4.16-2 All future work within streets, sidewalks, and public places in the City shall comply with Title 12 of the Municipal Code, which requires an encroachment permit from the City and compliance with set standards that include those in the Work Area Protection and Traffic Control Manual. Application for the permit shall be made as part of the City's plan check process and prior to any work on public areas or rights-of-</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>way.</p> <p>SC 4.16-3 Improvements to the City's transportation network are planned as part of the SCAG's Regional Transportation Improvement Plan (RTIP); the SANBAG's Measure I 2010-2040 Strategic Plan; and the City's Nexus Improvement/development impact fee (DIF) Program. Future development and redevelopment shall pay applicable DIF during the plan check process. The DIF, along with the use of State and Federal funds, is expected to implement various freeway, highway, roadway projects in and near Rancho Cucamonga.</p>	
<p>Congestion Management Program Future development and redevelopment would comply with the City's standard of LOS D or better; therefore, no exceedance of the CMP standards would occur and a less than significant impact would occur.</p>	<p>SC 4.16-1 Refer to Circulation System, above.</p> <p>SC 4.16-2 Refer to Circulation System, above.</p> <p>SC 4.16-3 Refer to Circulation System, above.</p>	<p>No Impact.</p>
<p>Air Traffic Future development and redevelopment would not create a direct demand for air transportation; compliance with SC 4.8-9 from Section 4.8, Hazards and Hazardous Materials, would prevent any hazards to aircraft operations. Impacts would be less than significant; no mitigation is required.</p>	<p>SC 4.8-9 Refer to Section 4.8, Hazards and Hazardous Materials, above.</p>	<p>Less Than Significant.</p>
<p>Roadway Hazards Increases in vehicle trips from future development and redevelopment under the proposed 2010 General Plan Update may increase the potential for traffic accidents. Compliance with applicable SCs would prevent the creation of traffic hazards. Impacts would be less than significant.</p>	<p>SC 4.16-2 Refer to Circulation System, above.</p> <p>SC 4.16-4 All future roadway improvements shall comply with the City's Roadway Functional Design Guidelines, which include the number of lanes, median improvements, access restrictions, intersection spacing, curbside parking, required rights-of-way, and easement access based on the roadway designation. Closely related to roadway design would be the provision of adequate line of sight, in accordance with the City's Intersection Line of Sight design guidelines and General Design</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>Guidelines that address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic and interconnected public and private sidewalks. Roadway improvement plans shall show compliance with these standards, as reviewed by the City's Building and Safety Department during the plan check process.</p> <p>SC 4.16-5 The City shall continue to implement Title 10 of the Municipal Code, which establishes various responsibilities and programs to regulate vehicles and traffic in the City. The enforcement of traffic regulations would promote safety on streets, sidewalks and driveways through speed limits, parking permits, truck routes, pedestrian rights and duties, intersection controls, and other restrictions.</p>	
<p>Emergency Access Future development and redevelopment under the proposed 2010 General Plan Update would have to provide emergency access in accordance with applicable SCs. Compliance with these regulations would reduce impacts to less than significant levels.</p>	<p>SC 4.16-2 Refer to Circulation System, above.</p> <p>SC 4.16-3 Refer to Circulation System, above.</p> <p>SC 4.16-4 Refer to Roadway Hazards, above.</p>	<p>Less Than Significant.</p>
<p>Alternative Transportation The proposed 2010 General Plan Update promotes alternative transportation systems, through 2010 General Plan Update goals and their supporting policies. Future development and redevelopment would need to comply with applicable SCs which would provide facilities for alternative modes of transportation and encourage the use of alternative transportation modes. No conflict with policies, plans and programs for alternative transportation would occur.</p>	<p>SC 4.16-6 Future development and redevelopment shall comply with the City's Trip Reduction Ordinance, which calls for the provision of amenities or programs to encourage the use of alternative modes of travel by employees; patrons; and visitors of commercial, industrial, office, and mixed use developments. These include shower facilities, preferred parking, bicycle storage, video conference facilities, transit improvements, and other measures to reduce vehicle trips in the City. These facilities shall be shown in the site improvement and building plans submitted to the City during the permit process.</p> <p>SC 4.16-7 Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register with the SCAQMD to</p>	<p>No Impact.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
	<p>implement an emission reduction program, in accordance with this Rule.</p> <p>SC 4.16-8 The City shall develop trails in accordance with the Hiking and Riding Trails Master Plan to provide opportunities for hiking, riding, and bicycle use throughout the City. Concurrently, the City shall also implement its Bicycle Plan for the development of bikeways, bike lanes, and bike routes throughout the City. Future development and redevelopment on sites where hiking, riding, and bicycle trails are planned shall provide the necessary improvements and/or land dedication to facilitate the implementation of the Hiking and Riding Trails Master Plan.</p> <p>SC 4.16-9 Future development and redevelopment shall comply with SANBAG's Long Range Transit Plan, which calls for improvements to the transit systems that serve the County, including the provision of premium transit service, bus transit improvements and rail system improvements. Accommodations for bus bays, bus stops, transit centers, and other facilities shall be provided by future development and redevelopment in accordance with the Long Range Transit Plan, and in consultation with SANBAG. Implementation of this plan is expected to encourage greater transit use in the County.</p>	
<p>Cumulative Impacts The 2010 General Plan Update would contribute to the increase in regional traffic volumes; however, the City's development impact fees would fund needed transportation projects (including regional traffic infrastructure). Therefore, cumulative impacts would be less than significant.</p>	<p>Refer to SCs 4.16-1 through 4.16-9, above.</p>	<p>Less Than Significant.</p>
<p>SECTION 4.17 – UTILITIES AND SERVICE SYSTEMS</p>		
<p>Water Supply and Infrastructure There would be adequate water supplies available to serve proposed land uses under the 2010 General Plan Update. Implementation of SB 610 and/or SB 221, where required,</p>	<p>SC 4.17-1 The City of Rancho Cucamonga shall ensure that all future projects implemented pursuant to the 2010 General Plan Update that are subject to SB 610 and/or SB 221 shall comply with all applicable requirements in order to demonstrate the availability of an adequate</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>and the identified 2010 General Plan Update goals and policies related to water supply and infrastructure would contribute to ensuring that adequate water resources would be available for future development in the City. A less than significant impact would occur.</p>	<p>and reliable water supply.</p>	
<p>Wastewater Infrastructure and Treatment Implementation of the 2010 General Plan Update would not result in an exceedance of wastewater treatment requirements with compliance with NPDES wastewater discharge requirements and CVWD standards and there would be a less than significant impact. There would be adequate capacity at the wastewater treatment plants serving the City (RP-1 and RP-4) with implementation of the 2010 General Plan Update. If RP-4 is expanded in the future to the planned 28 mgd, this would occur entirely within the facilities' existing footprint, which has been expressly planned to accommodate such an expansion. Therefore, based on this and the identified 2010 General Plan Update goals and policies related to wastewater infrastructure, there would be a less than significant impact related to wastewater treatment and conveyance infrastructure.</p>	<p>SC 4.17-2 The City of Rancho Cucamonga shall ensure that all future projects implemented under the 2010 General Plan Update that result in a new or modified point source comply with all applicable San Bernardino County Stormwater NPDES Permit rules.</p> <p>SC 4.17-3 Water and sewer plans shall be designed and constructed to meet the requirements of the Cucamonga Valley Water District (CVWD), Rancho Cucamonga Fire Protection District, and the Environmental Health Department of the County of San Bernardino. A letter of compliance from the CVWD is required prior to final map approval or issuance of permits, whichever occurs first. Such letter must have been issued by the water district within 90 days prior to the final map approval in the case of subdivision or prior to the issuance of permits in the case of all other residential projects.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>Electricity, Natural Gas and Communication Infrastructure There would be a less than significant impact related to the need for new or expanded SCE, SCGC or communication (AT&T/Time Warner) facilities with implementation of the CEQA process for individual projects.</p>	<p>SC 4.17-4 The City of Rancho Cucamonga shall ensure that all future projects implemented under the 2010 General Plan Update shall comply with all State Energy Efficiency Standards and City of Rancho Cucamonga codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, and construction and the use of energy saving appliances, conditioning systems, water heating, and lighting.) Plans submitted for building permits shall include written notes demonstrating compliance with energy standards and shall be reviewed and approved by the Planning Department prior to building permit issuance.</p> <p>SC 4.17-5 For existing structures, underground on-site utilities are to be located and shown on building plans submitted for building permit application.</p> <p>SC 4.17-6 Provide separate utility services to each parcel including sanitary sewerage system, water, gas, electric, power, telephone, and cable TV (all underground) in accordance with the Utility Standards. Easements shall be provided as required.</p> <p>SC 4.17-7 The developer shall be responsible for the relocation of existing utilities as necessary.</p>	<p>Less Than Significant.</p>
<p>Solid Waste Build out of the 2010 General Plan Update would result in an estimated net increase in solid waste disposal of 201.5 tons per day and 73,545 tons per year. This increase would represent approximately 2.7 percent of Mid-Valley Landfill's daily permitted capacity. The City of Rancho Cucamonga would continue compliance with AB 939 and SB 1016. Therefore, with continuing adherence to regulatory requirements and implementation of</p>	<p>No measures required.</p>	<p>Less Than Significant.</p>

**TABLE ES-1 (Continued)
 SUMMARY OF ENVIRONMENTAL IMPACTS**

Impact	Mitigation Program	Level Of Significance After Mitigation
<p>the identified goal and related policies in the proposed 2010 General Plan Update, the City would maintain compliance with applicable statutes and regulations related to solid waste and would not be served by a landfill with insufficient permitted capacity. There would be a less than significant impact related to solid waste.</p>		
<p>Cumulative Impacts Development pursuant to the 2010 General Plan Update would increase demand for utilities; however, development would occur in compliance with applicable regulations. A less than significant cumulative impact would occur.</p>	<p>Refer to SCs 4.17-1 through 4.17-7, above.</p>	<p>Less Than Significant.</p>

SECTION 2.0 INTRODUCTION

2.1 PURPOSE AND TYPE OF THIS EIR

This Program Environmental Impact Report (PEIR) has been prepared to evaluate the potential environmental impacts associated with the *City of Rancho Cucamonga 2010 General Plan Update*, as required under the California Environmental Quality Act (CEQA) of 1970, as amended (*California Public Resources Code*, Section 21000 et seq.) and the State CEQA Guidelines (Title 14, *California Code of Regulations* [CCR], Chapter 3, Section 15000 et seq.).

Sections 65300 et seq. of the *California Government Code* requires that each city and county adopt a comprehensive, long-term general plan for the physical development of land within its jurisdiction and sphere of influence. The City of Rancho Cucamonga last updated its General Plan in 2001, with the Housing Element updated in 2000. The current proposal is a comprehensive update that revisits the goals, approaches, strategies and implementation programs in the 2001 General Plan, including revisions to the Land Use Plan. This update is intended (1) to address changing conditions in the City and the region and (2) to make the revised General Plan better reflect the desired vision for the City's future.

An action that has the potential for causing a physical change in the environment is considered a "Project" under Section 21065 of CEQA and Section 15378 of the CEQA Guidelines. A "Project" is required to go through an environmental review process in accordance CEQA and the CEQA Guidelines. While the revision/update of a policy document (such as the Rancho Cucamonga General Plan) does not directly lead to environmental impacts or changes to the environment, future development in the City of Rancho Cucamonga, as regulated by the updated General Plan, would potentially result in environmental impacts. Also, the implementation of some programs in the updated or revised General Plan may lead to environmental impacts. Thus, the proposed update is considered a "Project" and subject to the provisions of CEQA.

Since the 2010 General Plan Update has the potential for indirect environmental impacts, this EIR has been prepared as a Program EIR (PEIR), as defined under Section 15168 of the CEQA Guidelines as:

15168. Program EIR

(a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- (1) Geographically,
- (2) A logical parts in the chain of contemplated actions,
- (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

(b) Advantages. Use of a program EIR can provide the following advantages. The program EIR can:

- (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
 - (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
 - (3) Avoid duplicative reconsideration of basic policy considerations,
 - (4) Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
 - (5) Allow reduction in paperwork.
- (c) Use with Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.
- (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.
 - (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.
 - (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
 - (4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.
 - (5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

The purpose of this PEIR is to inform the City, trustee and responsible agencies, decision makers, and the general public of the environmental effects anticipated with the approval and implementation of the updated Plan, as well as environmental effects associated with future development and redevelopment that would be allowed under the 2010 General Plan Update. This PEIR: (1) discloses information regarding potential significant adverse environmental impacts; (2) identifies measures that would be effective in reducing or avoiding any identified significant adverse impacts; (3) analyzes feasible alternatives to the 2010 General Plan Update and to future development and redevelopment in the City; and (4) fosters interagency coordination and public review.

This PEIR analyzes potential impacts from implementation of the City's 2010 General Plan Update and not any particular development project. As such and with the absence of more detailed information regarding future development projects as they may be proposed, this PEIR cannot and therefore does not evaluate detailed, site-specific and/or project-specific impacts associated with the development or redevelopment of each parcel in the City. Thus, the environmental analysis in this PEIR is broader in scope than found in Project EIRs and seeks to identify the general and cumulative impacts of development and buildout, which allows the City to develop areawide mitigation and programs to address these impacts.

As defined in Section 21094 of CEQA and Section 15152 of the CEQA Guidelines, this PEIR can be used by future development proposals as part of individual and subsequent environmental reviews for proposed development projects in the City, as part of a tiered approach to the environmental review process.

Thus, this PEIR will facilitate the environmental review of programs and development proposals that are approved, constructed, or implemented in the City. The PEIR is intended to serve as the primary environmental document for all future entitlements associated with implementation of the 2010 General Plan Update, including all programs required to implement the General Plan. Upon adoption, future development and redevelopment, as allowed under the 2010 General Plan Update, and implementation programs called out in the 2010 General Plan Update, will be reviewed as required by Section 21166 of CEQA and Section 15162 of the CEQA Guidelines.

2.1.1 AGENCIES HAVING JURISDICTION

State law requires that all EIRs be reviewed by trustee and responsible agencies. A "Trustee Agency" is defined in Section 15386 of the CEQA Guidelines as "a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California." Per Section 15381 of the CEQA Guidelines, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power".

The City of Rancho Cucamonga is the Lead Agency for the proposed 2010 General Plan Update. The PEIR will be used by the Rancho Cucamonga City Council in deciding whether to adopt and implement the proposed General Plan Update.

The California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS) are Trustee Agencies for sensitive wildlife resources that may be present in the City and that could be disturbed as part of General Plan implementation and future development and redevelopment. These trustee agencies may use this PEIR in their review and approval of discretionary permits needed for future development and redevelopment in the City.

The Santa Ana Regional Water Quality Control Board (RWQCB) is a Responsible Agency for discretionary permits needed for storm water discharges from implementation programs and future development and redevelopment in the City.

Other public agencies may also review or use the EIR in considering non-discretionary permits needed for implementation programs and future development proposals. These agencies may use the EIR (1) to evaluate the impacts of projects or developments on their facilities or public service levels during the processing of development and building permits; (2) in conjunction with changes in services that may occur with future development and redevelopment; and (3) to assist other agencies in planning for future facility expansions and service level upgrades needed to serve buildout of the City. These agencies include:

- Rancho Cucamonga Fire Protection District
- San Bernardino County Sheriff's Department
- Inland Empire Utilities Agency
- Alta Loma School District
- Etiwanda School District
- Chaffey Joint Union High School District
- Cucamonga School District
- Chaffey Community College District
- California Department of Transportation
- San Bernardino County (all departments)
- South Coast Air Quality Management District
- Southern California Association of Governments
- San Bernardino Associated Governments
- Cucamonga Valley Water District

In accordance with Section 21081 of CEQA and Section 15091 of the CEQA Guidelines, public agencies are required to make written findings for each environmental impact identified in the PEIR. If the lead agency and responsible agencies decide that the benefits of the 2010 General Plan Update outweigh any identified unmitigated significant environmental effects, they will be required to adopt a statement of overriding considerations supporting their actions. Future discretionary actions that would occur upon the City's adoption of the 2010 General Plan Update as well as those of responsible and trustee agencies, are described in Section 3.5, Intended Uses of the PEIR.

2.1.2 INCORPORATION BY REFERENCE

As permitted by Section 15150 of the CEQA Guidelines, this PEIR has referenced several technical studies, analyses, and reports. Information from the documents, which have been incorporated by reference into this PEIR, has been briefly summarized in the appropriate sections and the relationship between the incorporated part of the referenced document and the PEIR has been described.

In addition, documents and other sources that have been used in the preparation of this PEIR are identified in Section 8.0, References.

2.2 EIR FOCUS

2.2.1 SCOPING PROCESS

The City of Rancho Cucamonga has provided numerous opportunities for public participation during the planning process for updating its General Plan. These have included: (1) meetings with the GPAC, (2) community workshops, (3) stakeholder interviews, (4) Planning Commission and City Council study sessions, and (5) various community group outreach efforts. In addition, the City has complied with the CEQA Guidelines by providing opportunities for public participation in the environmental review process. Specifically, a Notice of Preparation (NOP) was distributed on November 16, 2009, to Federal, State, regional, and local government agencies and interested parties for a 30-day public review period to solicit comments and to inform agencies and the public of the proposed 2010 General Plan Update. The proposed revisions to the General Plan were described in the NOP, potential environmental effects associated with General Plan implementation were identified, and agencies and the public were invited to review and comment on the NOP. A copy of the NOP is provided in Appendix A.

Responses on the NOP were received from 8 agencies, which raised concerns on the following issues (the section of the EIR where each issue is addressed is identified in parentheses):

- Hazards (Section 4.8, Hazardous Materials);
- Water conservation through recycled water facilities (Section 4.17, Utilities and Service Systems);
- Heavy truck volumes on 4th Street and Milliken Avenue (Section 4.16, Transportation and Traffic);
- Modification of the Vineyard Avenue interchange at the Interstate 10 Freeway (Section 4.16, Transportation and Traffic);
- Hydraulic and water quality impacts to the City of Ontario (Section 4.9, Hydrology and Water Quality);
- Impacts to City of Ontario (Sections 4.1 through 4.17);
- Consistency with the Regional Transportation Plan and Compass Growth Visioning (Section 4.10, Land Use and Planning); and
- Air quality impacts (Section 4.3, Air Quality).

Comments received in response to the NOP are provided in Appendix A.

Additionally, the City of Rancho Cucamonga held a scoping meeting for the 2010 General Plan Update EIR at 2:00 PM on November 23, 2009, at the City of Rancho Cucamonga Tri-Communities Room. The purpose of the scoping meeting was to receive input on the environmental issues that should be addressed in the PEIR.

One private land owner representative attended the scoping meeting. The following environmental issue was raised at the scoping meeting (the section of the PEIR where the issue is addressed is identified in parentheses):

- Land use changes (Section 3.0, Project Description, and Section 4.10, Land Use and Planning).

Additionally, a question was raised at the scoping meeting that did not address environmental issues and is not addressed in this PEIR. This question involved a CEQA-related issue regarding thresholds of significance for the PEIR. It should be noted that this issue was addressed through discussion at the scoping meeting.

The NOP comments and the comment received from the public at the scoping meeting were used to focus the analysis in this PEIR. However, the City determined that all environmental issues should be addressed due to the citywide scope of the 2010 General Plan Update. These environmental issues include:

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Climate Change
- Cultural Resources
- Geology and Soils
- Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

2.2.2 ENVIRONMENTAL ANALYSIS

To facilitate analysis, a standard format was developed to analyze each environmental issue discussed in Section 4.0. This format is presented below, with a brief discussion of the information included within each topic. Please note that references to the City include its Sphere of Influence, unless otherwise expressly qualified.

Relevant Policies and Regulations

This section includes a summary of the existing Federal, State, regional, County, and local laws, regulations, and ordinances that directly relate to the environmental issue being analyzed. These are summarized to provide background information about ongoing policies and programs that are in place and to set the regulatory setting under which projects and development occurs.

Existing Conditions

This section describes the existing environmental conditions and environmental setting related to each environmental issue analyzed in the PEIR. In accordance with Section 15125 of the State CEQA Guidelines, both the existing local and regional settings are discussed as they existed when the NOP was circulated in November 2009. This section provides the baseline conditions with which environmental changes associated with the updated 2010 General Plan Update would be compared and analyzed.

Thresholds of Significance

Section 15126.2 of the CEQA Guidelines requires that an EIR “identify and focus on the significant environmental effects of the proposed project”. “Effects” and “impacts” mean the same under CEQA and are used interchangeably in this PEIR. A “significant effect” or “significant impact” on the environment is “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (14 CCR 15382 [CEQA Guidelines]).

In determining whether an impact is “significant”, Section 15064.7 of the CEQA Guidelines encourages each public agency to develop and publish thresholds of significance to use in determining the significance of an environmental impact. These thresholds may consist of identifiable quantitative, qualitative, or performance level criteria used to determine non-compliance or compliance. Non-compliance would mean the effect would be significant, and compliance with the thresholds would mean the effect normally would be less than significant.

The City of Rancho Cucamonga has not adopted thresholds of significance. Thus, the significance criteria used in the analysis in Section 4.0, Environmental Setting, Thresholds of Significance, Environmental Impacts, Mitigation Measures, Cumulative Impacts, and Level of Significance after Mitigation of this PEIR are derived from Appendix G of the CEQA Guidelines. In addition, City policies and standards, as well as thresholds adopted by other public agencies with jurisdiction over select environmental issues, are used as thresholds of significance. Also, accepted technical and scientific data are used in some instances to determine if an impact would be considered significant. An effort has been made to avoid overly subjective significance criteria, which are not based in specific CEQA policies, and to use generally accepted thresholds upon which significance can be determined. These thresholds are identified under each environmental issue and have been used in analyzing the potential impacts of the updated General Plan.

General Plan Goals and Policies

While the Rancho Cucamonga 2010 General Plan Update allows future development and redevelopment that could adversely affect the environment, it also seeks to preserve and protect the existing environment and resources in the Study Area. Thus, before an analysis of the potential impacts of the proposed 2010 General Plan Update is provided, components of the updated 2010 General Plan Update related to the environmental topic being analyzed and that would reduce or avoid potential adverse impacts on the environment are called out.

The proposed goals and policies in the Rancho Cucamonga 2010 General Plan Update that relate to each environmental issue are listed in this section, as they may serve to prevent or reduce the significance of potential adverse environmental effects.

Because goals, policies and implementation actions are part of the 2010 General Plan Update and will be implemented over the life of the General Plan, when adopted, they allow the General Plan to be self-mitigating to a large extent. However, these goals, policies, and implementation actions do not constitute mitigation measures as defined by CEQA.

Standard Conditions of Approval

Existing regulations and standard conditions include local, State, or Federal regulations, laws, and ordinances that serve to avoid or reduce potential environmental impacts and are required for all development proposals independent of CEQA review. Also, a number of ongoing programs and practices reduce or avoid environmental impacts. Since all new development and redevelopment would have to comply with these regulations and standard conditions, they are not listed as mitigation measures but are listed in this section as the regulatory framework under which implementation of the updated General Plan would occur.

Environmental Impacts

The analysis of environmental impacts presented in this PEIR identifies specific program-level, direct and indirect, short-term and long-term, and unavoidable impacts of the 2010 General Plan Update. While approval of the 2010 General Plan Update itself would not result in direct or immediate changes to the environment, implementation of the 2010 General Plan Update programs and future development that would be allowed pursuant to the 2010 General Plan Update could result in environmental changes or impacts. These impacts are indirectly attributable to the 2010 General Plan Update and thus are analyzed in this PEIR as “impacts”.

The 2010 General Plan Update goals and policies and other programs are not expected to result in environmental impacts, but are intended to avoid or reduce them.

The thresholds of significance (discussed above) provide the basis for distinguishing between impacts that are determined to be significant (i.e., impact exceeds the threshold of significance) and those that are considered less than significant. The analysis is structured to address each threshold, while considering the residual impact after implementing the proposed 2010 General Plan Update goals and policies and the Standard Conditions (SCs).

Where the investigation of a potential effect concludes that the effect is too speculative or subjective for evaluation, that conclusion is noted and the discussion of that effect is ended. Where the investigation demonstrates that a potential effect does or may (without undue speculation) occur, but is beneficial, that conclusion is noted. Where the investigation demonstrates that a potential effect is not significant or not adverse, that conclusion is noted.

Where the impact analysis demonstrates that a potential effect does or may (without undue speculation) occur and is found to have a substantial or potentially substantial **and** adverse impact on existing physical conditions within the City, that conclusion is noted.

A discussion of mitigation is then provided, along with a summary of the analysis for each threshold.

Cumulative Impacts

While the extent of environmental changes that would occur with individual projects that are proposed, planned, or under construction in the City may not be significant, the sum of the impacts of these cumulative projects and the 2010 General Plan Update may be cumulatively considerable, as defined in Section 15065(c) of the CEQA Guidelines. A discussion of the anticipated environmental changes resulting from the cumulative projects, from implementation of 2010 General Plan Update programs, and from the anticipated development under the 2010 General Plan Update on a cumulative level are addressed in this section. Section 4.0, Environmental Setting, Thresholds of Significance, Environmental Impacts, Mitigation Program, Cumulative Impacts, and Level of Significance after Mitigation contains a more detailed discussion of the cumulative impact analysis methodology.

Mitigation Measures

The mitigation measures (MMs) under each topical issue have been developed, when necessary, to reduce potentially significant adverse impacts after relevant goals and policies of the 2010 General Plan Update and existing regulations and standard conditions (SCs) are implemented.

Where a potentially significant adverse environmental effect has been identified and is not reduced to a level considered less than significant through the application of goals and policies in the 2010 General Plan Update and standard conditions and regulations, mitigation measures have been required.

Level of Significance After Mitigation

This section identifies the level of significance of the identified impacts after the implementation of the 2010 General Plan Update goals and policies, standard conditions and existing regulations, and the required mitigation measures. Unavoidable significant adverse impacts are those effects that either cannot be mitigated or that remain significant even after mitigation.

2.2.3 PROJECT SPONSOR AND CONTACT PERSON

The 2010 General Plan Update is a City-sponsored endeavor. The City of Rancho Cucamonga will approve the Update, adopt the General Plan, and implement the General Plan. All inquiries regarding the 2010 General Plan Update and this PEIR should be directed to:

James Troyer, Planning Director
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730
Phone: (909) 477-2750
Fax: (909) 477-2847
james.troyer@cityofrc.us

2.3 PUBLIC REVIEW OF THE DRAFT EIR

The Draft Program EIR for the Rancho Cucamonga 2010 General Plan Update is being distributed to responsible and trustee agencies, other affected agencies, surrounding cities, interested parties, and all parties who requested a copy of the PEIR in accordance with CEQA. During the 45-day public review period, this Draft Program EIR, including the technical appendices, is available for review at the following locations:

- City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730
(909) 477-2750

- Archibald Library
7368 Archibald Avenue
Rancho Cucamonga, CA 91730

- Paul A. Biane Library
12505 Cultural Center Drive
Rancho Cucamonga, CA 91739

and

- <http://www.rcgeneralplan.com>

Comments on the Draft PEIR from public agencies and interested individuals will be accepted during the 45-day public review period from February 16, 2010 to April 1, 2010. Comments on the Draft PEIR should be sent to the Lead Agency contact identified above. Upon completion of the 45-day public review period, written responses will be prepared for all significant environmental issues raised in the comment letters and the comments and responses included into the Final Program EIR. All responses to comments submitted on this Draft Program EIR by agencies will also be provided to those agencies at least ten days prior to final action on the proposed General Plan update.

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The City of Rancho Cucamonga and its Sphere of Influence (collectively referred to as the “Study Area”) encompass 24,442 gross acres and are located in southwestern San Bernardino County. The City is surrounded by developed municipalities to the west, south and east, including the cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the east and north. The northernmost portion of the City’s Sphere of Influence is adjacent to the San Bernardino National Forest. The Project’s regional and local setting is shown in Exhibit 3-1, Project Location. Interstate and regional access to the City is provided by Interstate (I) 15, which runs in a general north-south direction and crosses the eastern portion of the City, and by State Route (SR) 210, an east-west freeway which passes through the center of the City. The I-10 freeway also provides regional access and is located approximately 0.75 mile south of the City boundary. Exhibit 3-2, Aerial Photograph, provides an aerial depiction of the Project Site and surrounding uses.

3.2 ENVIRONMENTAL SETTING

A general description of the regional and local environmental setting for the City of Rancho Cucamonga is provided below. More detailed information regarding the environmental setting for specific conditions is provided under each topical issue in Section 4.0 of this EIR. The environmental setting as described in this EIR constitutes the baseline of existing conditions in the City at the time the Notice of Preparation (NOP) for the EIR was distributed in November 2009.

3.2.1 PROJECT SETTING AND CHARACTERISTICS

The City of Rancho Cucamonga covers approximately 20,707 acres, with another 3,735 acres within the City’s Sphere of Influence.¹

Existing land uses within the Study Area include a broad spectrum of residential, commercial, industrial, open space, and institutional uses, with the majority of residential uses located north of Foothill Boulevard and industrial uses largely located south of Foothill Boulevard. Regional-serving commercial uses are located along Foothill Boulevard, east of Haven Avenue, and at the Victoria Gardens Regional Lifestyle Center, which is located at Day Creek Boulevard, Foothill Boulevard, and the I-15 Freeway. Smaller neighborhood commercial centers are found at scattered sites throughout the City.

In addition to land within the City boundaries, unincorporated County land that has been designated by the Local Agency Formation Commission of San Bernardino County as being within the logical extension of the City’s boundaries and could be annexed into the City in the future is identified as Rancho Cucamonga’s Sphere of Influence (SOI). This area is located north of the City boundaries and includes Deer Canyon, Day Canyon, East Etiwanda Canyon, and a large area of San Bernardino County Flood Control District Corridor property located between Deer Creek and Day Creek Channel.

¹ A sphere of influence is the area which a city or special district is expected to eventually provide services through annexation or changes in local government boundaries. The Local Agency Formation Commission of the county designates the spheres of influence of individual cities to resolve uncertainty concerning the availability and source of services for undeveloped or unincorporated land; to promote orderly land use and service planning by public agencies; and to provide direction to landowners when and if they seek additional or higher level services.

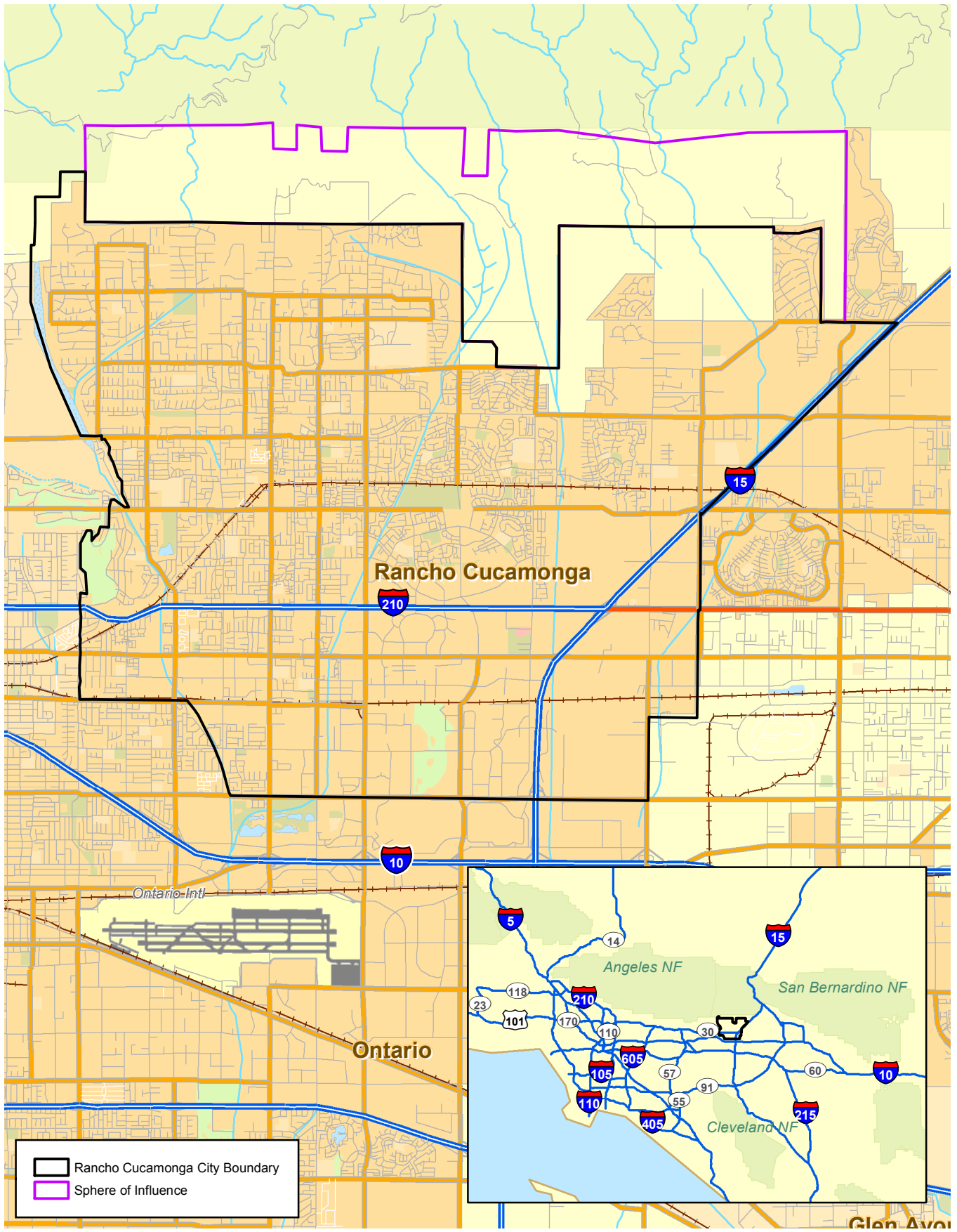
Exhibit 3-3 shows the City boundaries and its SOI, which represent the Study Area for the proposed Rancho Cucamonga 2010 General Plan Update.



3.3 PROJECT OBJECTIVES

Section 15124 of the California Environmental Quality Act (CEQA) Guidelines (see 14 *California Code of Regulations* [CCR]) requires an environmental impact report (EIR) to include a statement of objectives that guide the proposed project (in this case, the proposed 2010 General Plan Update). This disclosure assists in developing the range of project alternatives to be investigated in the EIR and provides a rationale for the adoption of a Statement of Overriding Considerations, if one is, in fact, adopted.

The following objectives have been established by the City relative to the 2010 General Plan Update:

- To establish a planning framework that incorporates the City's Healthy RC initiative: Healthy Mind, Body, and Earth.
- To maintain well-established land use patterns for most of the City while creating new opportunities for mixed-use development at strategic locations in Rancho Cucamonga in an effort to facilitate use of transit, encourage walking as an alternative to automobile travel for short trips, and allow more people to live and shop near their homes.
- To create opportunities for the provision of varied housing types that meet the needs of all household income levels and lifestyle choices.
- To recognize, promote, and preserve Rancho Cucamonga's history as represented by buildings, agricultural landscapes, and unique community features.
- To enhance community mobility by implementing a comprehensive and connected citywide network of streets, bikeways, and pedestrian trails; by accommodating bus rapid transit along Foothill Boulevard and other locations as demand dictates; and by increasing use of commuter rail through land use policies.
- To move forward with initiatives that will reduce greenhouse gas emissions, including land use and mobility planning practices, programs that promote sustainable building practices, and City purchasing decisions.
- To conserve natural resources through land use regulations that respect hillside habitats and policies aimed at reducing water consumption, energy use, and refuse generation.
- To promote policies that provide for City compliance with applicable Federal and State laws.
- To provide clear direction for use of lands within the City's Sphere of Influence.
- To designate lands for a variety of beneficial open space purposes: for recreation, for resource conservation, for public safety enhancement, for the managed production of resources, and for preservation of historic landscapes.

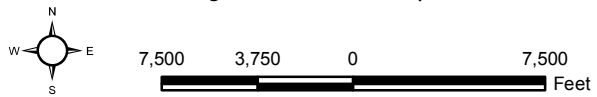


	Rancho Cucamonga City Boundary
	Sphere of Influence

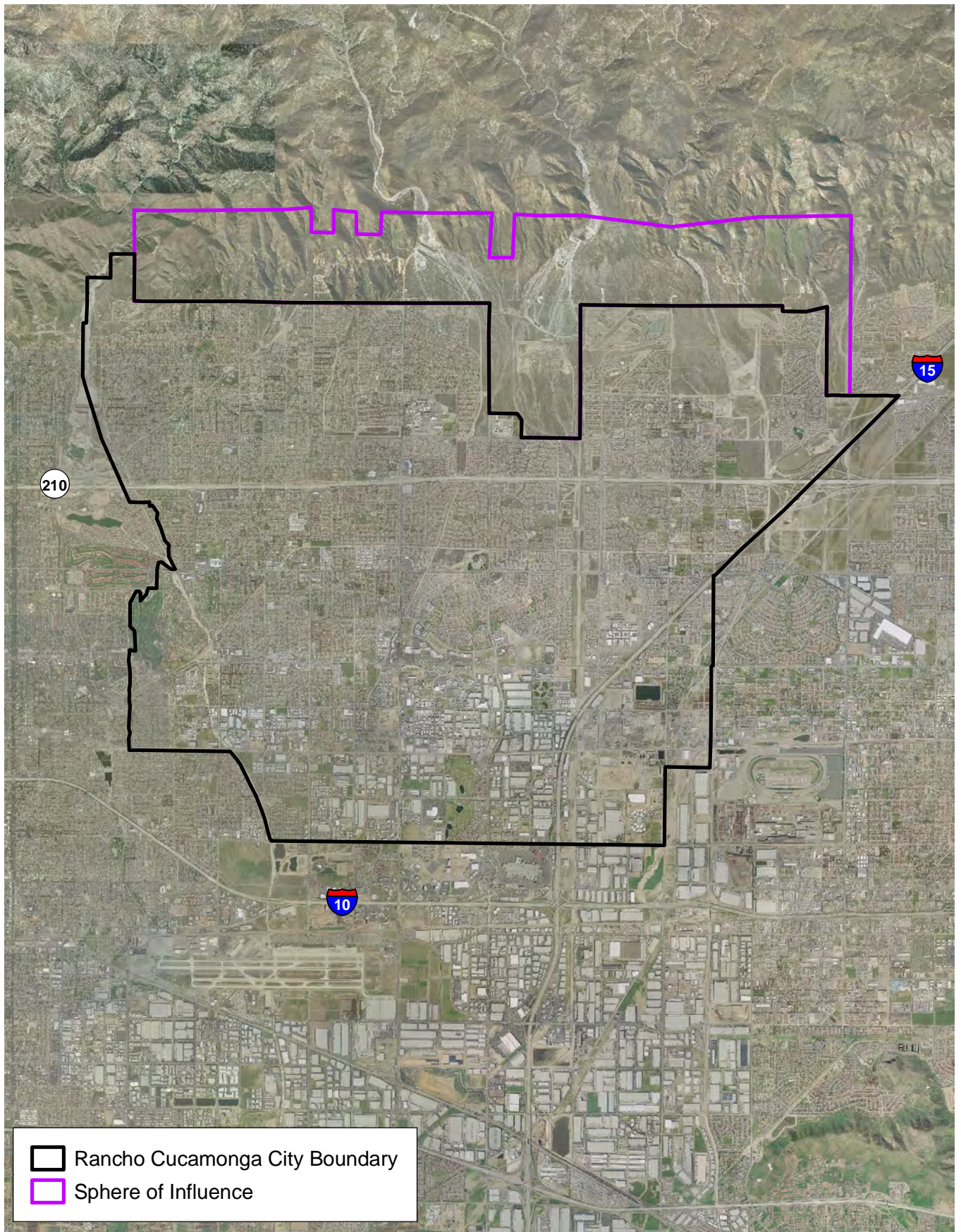
Project Location



Rancho Cucamonga General Plan Update

Exhibit 3-1



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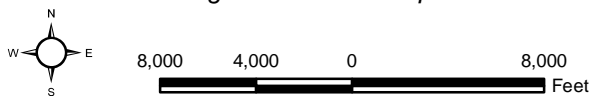


-  Rancho Cucamonga City Boundary
-  Sphere of Influence

Aerial Photograph

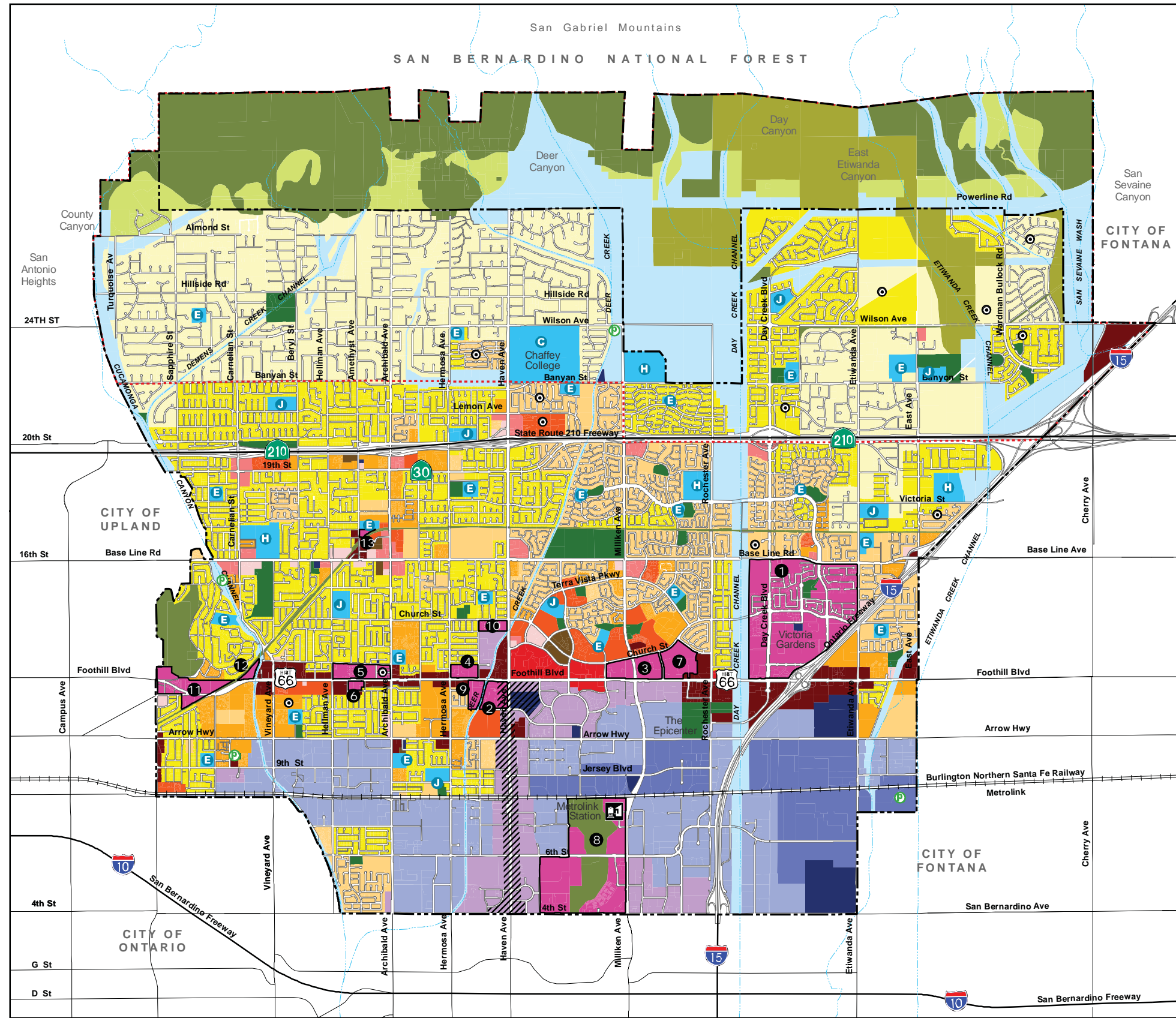
Rancho Cucamonga General Plan Update

Exhibit 3-2



Bonterra
CONSULTING

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Land Use Designations

Residential

- Very Low (0.1 - 2.0 du/ac)
- Low (2.0 - 4.0 du/ac)
- Low Medium (4.0 - 8.0 du/ac)
- Medium (8.0 - 14.0 du/ac)
- Medium High (14.0 - 24.0 du/ac)
- High (24.0 - 30.0 du/ac)

Commercial

- Office (0.40 - 1.0 FAR)
- Neighborhood Commercial (0.25 - 0.35 FAR)
- Community Commercial (0.25 - 0.35 FAR)
- General Commercial (0.25 - 0.35 FAR)

Mixed Use

- Mixed Use (0.25 - 1.0 FAR)

Industrial

- Industrial Park (0.40 - 0.60 FAR)
- General Industrial (0.50 - 0.60 FAR)
- Heavy Industrial (0.40 - 0.50 FAR)

Open Space

- Hillside Residential (0.1 - 2.0 du/ac)
- Conservation
- Open Space (0.0 - 0.1 du/ac)
- Flood Control/Utility Corridor

Schools and Parks

- Elementary School (E)
- Junior High School (J)
- High School (H)
- College (C)
- Proposed Park¹ (P)

Public Facility

- Civic/Regional (0.40 - 1.0 FAR)
- Schools (0.10 - 0.20 FAR)
- Parks

Overlays

- Haven Avenue Office Overlay
- Equestrian/Rural Area Overlay
- Master Plan Overlay

Boundaries

- Rancho Cucamonga City Boundary
- Sphere of Influence

Mixed Use Areas

1. Victoria Gardens
 2. Town Center (Foothill Boulevard and Haven Avenue)
 3. Terra Vista
 4. Foothill Boulevard between Hermosa Avenue and Center Avenue
 5. Foothill Boulevard between Archibald Avenue and Hellman Avenue
 6. Foothill Boulevard at Helms Avenue and Hampshire Street
 7. Foothill Boulevard and Mayten Avenue
 8. Industrial Area Specific Plan (Sub-Area 18)
 9. Foothill Boulevard and Deer Creek Channel
 10. Haven Avenue and Church Street Site
 11. Western Gateway (Bear Gulch Area)
 12. Foothill Boulevard-Cucamonga Channel Site
 13. Historic Alta Loma (Amethyst Site)

Note: 1. Location of proposed parks are not fixed, and may be adjusted to accommodate future planning needs.

Source: Rancho Cucamonga and San Bernardino County Assessor, 2009.

0 0.25 0.5 1 1.5 2 Miles

Source: Hogle Ireland 2009

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3.4 PROJECT DESCRIPTION

The proposed project is a comprehensive update to the *City of Rancho Cucamonga General Plan*. The proposed General Plan Update documents a vision of the future. As a long-range policy document (with a projected horizon of 15 to 20 years), the General Plan guides the look, feel, and experience of the City of Rancho Cucamonga now and in the future.

The General Plan reinforces established land uses attained in the City over the last 10 to 15 years by emphasizing protection of existing residential neighborhoods and targeting new residential, office and commercial growth along major corridors (such as Foothill Boulevard) and other areas south of Foothill Boulevard (such as Haven Avenue) where development opportunities exist on vacant and underutilized properties.

The land use growth strategy employed in the proposed 2010 General Plan Update focuses on the following three objectives:

- To protect and maintain established residential neighborhoods
- To target new infill development opportunities
- To integrate land use and transportation

3.4.1 OVERALL FRAMEWORK

The proposed General Plan Update has been organized around the City's Healthy RC objectives of promoting Healthy Mind, Body, and Earth. As such, many of the goals and policies focus on actions that will encourage residents and businesses to live their lives and conduct activities in a more sustainable and healthful manner.

In addition, the proposed General Plan Update looks to guide future development and community enhancement activities consistent with these Guiding Principles:

- The Spirit of Family
- The Spirit of Discovery and Knowledge
- The Spirit of Community
- The Spirit of Heritage
- The Spirit of Independence and Self-Reliance
- The Spirit of Innovation
- The Spirit of Tomorrow

General Plan Elements

The proposed 2010 General Plan Update addresses six of the seven State-mandated general plan elements and other issues that are important to the community. The proposed 2010 General Plan Update contains the following elements which are referred to in the 2010 General Plan Update as "Chapters":

- Managing Land Use, Community Design, and Historic Resources
- Community Mobility
- Economic Development
- Community Services
- Resource Conservation
- Public Facilities and Infrastructure
- Public Health and Safety

The other State-required topic is the Housing Element, which the City is currently updating; however, this update is independent of this General Plan Update process and is not evaluated as part of this PEIR. Summaries of the content and purpose of each of the six chapters in the General Plan Update are provided below.

In addition, the proposed General Plan Update includes a comprehensive Implementation Plan that establishes the actions the City will pursue over the next 15 to 20 years to forward goals and policies.

Managing Land Use, Community Design, and Historic Resources Chapter

The Managing Land Use, Community Design, and Historic Resources Chapter defines the distribution and location of land uses to achieve economic efficiency, to balance aesthetic appeal and functionality, and to preserve historical resources in an effort to enhance the overall quality of community life.

This Chapter projects the buildout of lands pursuant to land use policy, as shown in Table 3-1 below.

**TABLE 3-1
GENERAL PLAN BUILDOUT SUMMARY**

	Baseline: 2009			General Plan Buildout: 2030			Change	Percent Change
	City	SOI	Total	City	SOI	Total		
Dwelling Units	55,608	91	55,669 ^a	62,196	1,057	63,253	7,584	13.6
Population	179,200	300	179,500	200,400	3,400	203,800	24,300	13.5
Non-Residential Square Feet	80,030,100	0	80,030,100	99,797,700	0	99,797,700	19,767,600	24.7
Employment	77,350	0	77,350	103,040	0	103,040	25,690	33.2

SOI: Sphere of Influence
^a This figure is an estimate derived from geographic information system files and is slightly less than the California Department of Finance housing estimate for 2009 housing stock referred to in Section 4.13 of this PEIR. The difference between the two figures is not statistically significant.
 Source: Rancho Cucamonga 2009b.

Table 3-2 compares the existing (2001) General Plan buildout to the proposed General Plan buildout for dwelling units, population, and employment to acquaint the reader with the overall changes from one plan to another.

**TABLE 3-2
COMPARISON OF EXISTING GENERAL PLAN TO PROPOSED
GENERAL PLAN**

	Current General Plan Buildout ^a	General Plan Buildout: 2030 ^b	Change	Percent Change
Dwelling Units	55,456	63,253	7,797	14.1
Population	156,280	203,800	47,520	30.4
Employment	112,025	103,040	-8,985	-8.9

^a Rancho Cucamonga 2009b
^b City of Rancho Cucamonga 2001a

The General Plan Update establishes 21 land use designations that are divided into nine categories, including residential, commercial, mixed-use, industrial, public facilities, schools, parks, open space and conservation, and vacant lands (for existing conditions only). The land use designations for the Study Area are shown on Exhibit 3-3, General Plan Land Use Map. Table 3-3, Buildout Summary By Land Use, provides a breakdown of acreage, number of dwelling units, and employment generation estimates for each land use designation.

The development capacity projected for the proposed General Plan Update is based upon assumed levels of development for all land use categories. The City has not assumed that all properties will be developed at the maximum densities and intensities stated for each land use category. Rather, anticipated densities and intensities have been assumed. In Tables 3-4, Residential Land Use Summary, and 3-5, Non-Residential Land Use Summary, the anticipated densities and intensities yield the total “target” dwelling units and probable non-residential square footage, which are based on actual density and intensity levels derived from development applications. Also, many properties are already developed at densities and intensities lower than those permitted by the General Plan, and the City anticipates that over the 15- to 20-year horizon of the General Plan, the majority of properties citywide will not redevelop. For purposes of analysis in this PEIR, “buildout” of the proposed General Plan Update means achieving established “target densities.” Section 4.10 analyzes the potential for development beyond these target densities.

Residential Designations

Six residential land use designations allow for a variety of densities, including preservation of existing neighborhoods and creation of opportunities for new housing types. Table 3-4, Residential Land Use Summary, identifies the target number of dwelling units to be developed within each residential land use designation.

While these designations primarily allow for residential development, other allowable land uses include parks, trails, special residential uses addressed by State law, child care facilities, schools, and places of religious assembly. Proposed residential density ranges are as follows:

- Very Low Residential (0.1–2.0 dwelling units per acre);
- Low Residential (2.0–4.0 dwelling units per acre);
- Low Medium Residential (4.0–8.0 dwelling units per acre);
- Medium Residential (8.0–14.0 dwelling units per acre);
- Medium High Residential (14.0–24.0 dwelling units per acre); and
- High Residential (24.0–30.0 dwelling units per acre).

The Mixed-Use and Open Space designations also provide opportunity for residential development and are discussed further below.

Non-Residential Designations

Table 3-5, Non-Residential Land Use Summary, identifies the probable building square footage projected at buildout and anticipated employment associated with each non-residential land use designation.

**TABLE 3-3
BUILDOUT SUMMARY BY LAND USE**

Land Use Designations	Acres ^a			Percent of Total	Target Dwelling Units			Probable Non-Residential (City Only)	
	City	SOI	Total		City	SOI	Total	Square Feet (in thousands)	Employment
Hillside (0.1–2.0 du/ac)	133	695	828	3.1%	151	831	982	–	–
Very Low Density (0.1–2.0 du/ac)	4,007	–	4,007	15.1%	7,394	–	7,394	–	–
Low Density (2.0–4.0 du/ac)	4,371	–	4,371	16.5%	18,050	–	18,050	–	–
Low Medium Density (4.0–8.0 du/ac)	1,852	–	1,852	7.0%	13,320	–	13,320	–	–
Medium Density (8.0–14.0 du/ac)	790	–	790	3.0%	9,283	–	9,283	–	–
Medium High Density (14.0–24.0 du/ac)	367	–	367	1.4%	7,432	–	7,432	–	–
High Density (24.0–30.0 du/ac)	44	–	44	0.2%	1,221	–	1,221	–	–
Mixed Use ^b	902	–	902	3.4%	5,345	–	5,345	11,973	20,270
Office (0.40–1.0 FAR)	86	–	86	0.3%	–	–	–	1,497	3,180
Neighborhood Commercial (0.25–0.35 FAR)	164	–	164	0.6%	–	–	–	1,785	3,030
Community Commercial (0.25–0.35 FAR)	119	–	119	0.4%	–	–	–	1,292	1,970
General Commercial (0.25–0.35 FAR)	470	–	470	1.8%	–	–	–	6,555	10,020
Industrial Park (0.40–0.60 FAR)	559	–	559	2.1%	–	–	–	9,739	6,610
- Haven Avenue Office Overlay (0.40–1.0 FAR)	215	–	215	0.8%	–	–	–	3,745	7,950
General Industrial (0.50–0.60 FAR)	1,974	–	1,974	7.4%	–	–	–	42,993	29,220
Heavy Industrial (0.40–0.50 FAR)	891	–	891	3.4%	–	–	–	15,523	15,820
Open Space (0.0–0.1 du/ac)	483	2,496	2,979	11.2%	–	226	226	–	–
Conservation	353	983	1,336	5.0%	–	–	–	–	–
Flood Control/Utility Corridor	1,711	1,753	3,464	13.0%	–	–	–	–	–
Civic/Regional 0.40–1.0 FAR)	130	–	130	0.5%	–	–	–	2,265	1,050
Schools (0.10–0.20 FAR)	558	–	558	2.1%	–	–	–	2,430	3,920
Parks	445	–	445	1.7%	–	–	–	–	–
GRAND TOTAL	20,624	5,927	26,551	100.0%	62,196	1,057	63,253	99,797	103,040
Notes:									
^a Acres include existing development and undeveloped vacant properties.									
^b Mixed Use allows both residential and non-residential uses.									
Source: Rancho Cucamonga 2009b.									

**TABLE 3-4
RESIDENTIAL LAND USE SUMMARY**

Land Use Designations	Density Factor ^a	City			Sphere of Influence			Totals		
		Acres	Dwelling Units ^b	Target Dwelling Units ^c	Acres	Dwelling Units ^b	Target Dwelling Units ^c	Total Acreage	Total Dwelling Units	Total Target Dwelling Units
Residential Designations										
Hillside (0.1–2.0 du/ac)	1.29	133	13–268	151	695	70–1,400	831	828	83–1,668	982
Very Low (0.1–2.0 du/ac)	1.29	4,007	401–8,029	7,394	–	–	–	4,007	401–8,029	7,394
Low (2.0–4.0 du/ac)	3.25	4,371	9,194–18,080	18,050	–	–	–	4,371	9,194–18,080	18,050
Low Medium (4.0–8.0 du/ac)	6.50	1,852	7,739–15,100	13,320	–	–	–	1,852	7,739–15,100	13,320
Medium (8.0–14.0 du/ac)	11.75	790	6,270–10,837	9,283	–	–	–	790	6,270–10,837	9,283
Medium High (14.0–24.0 du/ac)	20.25	367	5,237–8,915	7,432	–	–	–	367	5,237–8,915	7,432
High (24.0–30.0 du/ac)	27.75	44	1,376–1,713	1,221	–	–	–	44	1,376–1,713	1,221
Mixed Use ^d	Varies	276	3,701–6,511	5,345	–	–	–	276	3,701–6,511	5,345
Open Space (0.0–0.1 du/ac)	0.10	483	0–48	– ^e	2,496	0–250	226	2,979	0–298	226
Residential Subtotal		12,323	33,931–69,501	62,196	3,191	70-1,650	1,057	15,514	34,001–71,151	63,253
Notes:										
^a The Density Factor is based upon actual development that has occurred in the City and represents a level midway between 50% and 75% of the range. It is used to calculate target number of dwelling units. This factor is only applied to vacant developable lands. A different Density Factor was applied to existing development to obtain an accurate baseline number.										
^b The range of dwelling units was derived by multiplying the lower and upper threshold of density/intensity range by the number of acres, and rounded to the nearest whole number. This range represents the theoretical potential. Some development will produce densities at or near the top of the range; however, most will not.										
^c Target density is the probable level of development based on historical development patterns, except for Mixed Use Residential, which is based primarily on a target density.										
^d Mixed Use allows both residential and non-residential uses.										
^e Open Space is generally a non-residential category that permits a very limited number of residential units on privately owned properties. Within the City, the Open Space designation applies to the golf courses and the Pacific Electric Trail. In the City's northwest quadrant, a few properties are designated Open Space and could yield residential units. However, any such development would be limited to a density of 0.1 unit per acre (or 1 unit per parcel on lots less than 10 acres in size) and would be subject to the slope, drainage (including flood zones), and fault zone analysis at a minimum under the Hillside Overlay Ordinance, which further limits any residential development potential.										
Source: Rancho Cucamonga 2009b.										

**TABLE 3-5
NON-RESIDENTIAL LAND USE SUMMARY**

Land Use Designations	Acres			Square Feet (in thousands) ^{a,b} (City Only)	Probable Square Feet (in thousands) (City Only)	Employment ^c (City Only)
	City	SOI	Total Acres			
Non-Residential						
Office (0.40-1.0 FAR)	86	–	86	1,497–3,746	1,497	3,180
Neighborhood Commercial (0.25-0.35 FAR)	164	–	164	1,785–2,500	1,785	3,030
Community Commercial (0.25-0.35 FAR)	119	–	119	1,292–1,810	1,292	1,970
General Commercial (0.25-0.35 FAR)	470	–	470	6,555–7,165	6,555	10,020
<i>Subtotal</i>	<i>839</i>	<i>–</i>	<i>839</i>	<i>11,129–15,221</i>	<i>11,129</i>	<i>18,200</i>
Mixed-Use (0.25-1.0 FAR) ^d	626	–	626	6,498–25,996	11,973	20,270
<i>Subtotal</i>	<i>626</i>	<i>–</i>	<i>626</i>	<i>6,498–25,996</i>	<i>11,973</i>	<i>20,270</i>
Industrial Park (0.40-0.60 FAR)	559	–	559	9,739–14,610	9,739	6,610
Haven Overlay (0.40-1.0 FAR)	215	–	215	3,745–9,365	3,745	7,950
General Industrial (0.50-0.60 FAR)	1,974	–	1,974	42,993–51,592	42,993	29,220
Heavy Industrial (0.40-0.50 FAR)	891	–	891	15,523–19,405	15,523	15,820
<i>Subtotal</i>	<i>3,639</i>	<i>–</i>	<i>3,639</i>	<i>72,000–94,972</i>	<i>72,000</i>	<i>59,600</i>
Open Space (0.0-0.10 du/ac)	483	2,496	2,979	–	–	–
Conservation	353	983	1,336	–	–	–
Flood Control/Utility Corridor	1,711	1,753	3,464	–	–	–
<i>Subtotal</i>	<i>2,547</i>	<i>5,232</i>	<i>7,779</i>	<i>–</i>	<i>–</i>	<i>–</i>
Civic/Regional (0.40-1.0 FAR)	130	–	130	2,265–5,662	2,265	1,050
Schools (0.10-0.20 FAR)	558	–	558	2,430–4,861	2,430	3,920
Parks	445	–	445	–	–	–
<i>Subtotal</i>	<i>1,133</i>	<i>–</i>	<i>1,133</i>	<i>4,695–10,523</i>	<i>4,695</i>	<i>4,970</i>
Non-Residential Subtotal	8,784	5,232	14,016	94,322–146,712	99,797	103,040

Notes:

^a The range of square footage is derived by multiplying the probable lower and upper threshold of intensity range by the number of acres, and rounded to the nearest hundred.

^b Non-residential FAR Range: lower number is the probable FAR on average, but in some cases it may be lower. Higher number is the maximum FAR allowed for any specific project.

^c Employment is calculated by using the Probable Square Feet and employment factors for each non-residential land use designations.

^d Mixed use allows both residential and non-residential use.

Source: Rancho Cucamonga 2009b.

Commercial

Four commercial designations establish opportunities for varied commercial business enterprises to serve local residents and visitors. Commercial intensities are expressed as a probable range of floor-area ratio (FAR)², and include:

- Office (0.4–1.0 FAR);
- Neighborhood Commercial (0.25–0.35 FAR);
- General Commercial (0.25–0.35 FAR); and
- Community Commercial (0.25–0.35 FAR).

Mixed Use

The Mixed-Use designation creates opportunities for more intensely developed districts to combine complementary commercial, office, residential, commercial recreation, and community uses in areas with easy access to transit. In combination with a number of criteria outlined in the proposed 2010 General Plan Update, the Mixed-Use designation allows for a density range of 8 to 30 dwelling units per acre³. The proposed 2010 General Plan Update identifies special development requirements for the following development areas:

- Victoria Gardens Master Plan/Victoria Arbors;
- Town Center (southwest corner of Haven Avenue and Foothill Boulevard);
- Terra Vista along Milliken Avenue and Foothill Boulevard;
- Foothill Boulevard between Hermosa Avenue and Center Avenue;
- Foothill Boulevard between Archibald Avenue and Hellman Avenue;
- Foothill Boulevard at Helms Avenue, and Hampshire Street;
- Foothill Boulevard and Mayten Avenue;
- *Industrial Area Specific Plan* (Sub-Area 18), which is bound by 4th Street, Milliken Avenue, railroad tracks, and Utica Street;
- Foothill Boulevard and Deer Creek Channel;
- Haven Avenue and Church Street;
- Western Gateway (Bear Gulch Area);
- Foothill Boulevard-Cucamonga Channel Site (near the northwestern corner of Foothill Boulevard and Vineyard Avenue); and
- Historic Alta Loma (Amethyst Site).

Industrial

The proposed General Plan Update establishes three industrial designations to allow for a variety of diverse industrial employment opportunities throughout the City. Industrial intensities, expressed as a probable range of FAR, for each of the industrial designations are:

- Industrial Park (0.40–0.60 FAR);
- General Industrial (0.50–0.60 FAR); and
- Heavy Industrial (0.40–0.50 FAR).

² Floor-Area Ratio is the ratio of gross floor area of all buildings totaled for all floors (not including parking structures) permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net square feet of land area, a Floor-Area Ratio of 1.5 would allow 15,000 square feet of floor area.

³ A three-acre area within the Victoria Gardens Master Plan/Victoria Arbors mixed-use area allows for up to 100 dwelling units per acre.

Open Space

The Open Space Designations include four designations that identify areas for preservation and allows for limited development.

- Hillside Residential (0.1–2.0 dwelling units per acre);
- Conservation (no development);
- Open Space (0–0.1 dwelling units per acre); and
- Flood Control/Utility Corridor (no development).

Public Facility

The Public Facility designations include three designations that allow for land uses that are operated for public benefit. The intensity range is expressed as a probable range of FAR and includes the following:

- Civic/Regional (0.4-1.0 FAR);
- Schools (0.1-0.2 FAR); and
- Parks.

Land Use Overlays

In addition to land use designations, the proposed General Plan Update identifies three overlays that allow for additional flexibility in land development within specific areas of the City. Overlay areas are intended to provide customized development standards to support the overall goals of the City. These overlay areas are as follows:

- ***Haven Avenue Office Overlay.*** The Haven Avenue Office Overlay District provides an area for intensive, high-quality office development at this highly visible community gateway. A progressive, sophisticated, and urban style of development is anticipated for the area, which is envisioned as the City's premier office corridor. Haven Avenue has a unique combination of access to I-10 and LA/Ontario Airport, making it an ideal location for high-end office development.
- ***Equestrian/Rural Area Overlay.*** The Equestrian/Rural Overlay allows for the keeping of horses and other farm animals, subject to regulations specified in the Development Code. All new developments within this overlay are required to provide community and local trails for equestrian use in accordance with the Hiking and Riding Trails Plan (see Chapter 5, Community Services). Properties designated as Very Low Residential are also subject to the Equestrian/Rural Overlay regulations.
- ***Master Plan Overlay.*** The Master Plan Overlay provides a tool to look beyond the limits of a particular property to solve area- or district-wide circulation, drainage, and neighborhood compatibility issues. The Master Plan Overlay creates an opportunity for the City to address the special or unique needs or characteristics of certain areas so designated by the General Plan, to ensure a harmonious relationship between existing and proposed uses, and to coordinate and promote the community improvement efforts of both private and public resources. The requirement for implementation of a project using the Master Plan Overlay is to prepare a conceptual master plan as a precursor to entitlement approval.

Community Mobility Chapter

The updated Community Mobility Chapter addresses the need for transportation planning to enhance and support planned growth within the City and its Sphere of Influence. This Chapter addresses both conventional transportation issues related to vehicular use of the local roadway network and the integration of alternative transportation methods such as mass transit, bicycle and pedestrian networks, and equestrian and hiking trails. This Chapter establishes the concept of “Complete Streets” for the City. This Chapter contains goals and policies that support development of a balanced, citywide circulation system that accommodates all users and all transportation modes. This Chapter is divided into the following sections:

- Community Mobility: The Street System;
- Transit;
- Increasing Bicycle Use;
- Accommodating Pedestrians;
- Freight and Goods Movement;
- Aviation; and
- Related Transportation Plans.

Economic Development Chapter

The Economic Development Chapter sets forth a plan for continued City development in a manner that capitalizes on the City’s economically diverse, relatively affluent, and well-educated community. This Chapter identifies commercial and industrial infill and revitalization opportunities within the City, with the goal of attracting professional and “green” technology employers to continue economic expansion and diversification. As part of this Chapter, the following key economic development issues are identified and discussed:

- Diverse and Multi-Focused Local Economy;
- Knowledge-Based Businesses;
- Retail Expansion;
- Industrial Retention; and
- Quality of Life.

Community Services Chapter

The Community Services Chapter is organized into four sections: Parks and Special Use Facilities, Hiking and Riding Trails, Community Services Programs, and Healthy Lifestyles. Rancho Cucamonga is a City of communities with high-quality park facilities, extensive hiking and riding trails, and comprehensive community service programs. The Community Services Chapter identifies the anticipated need for community services based on the City’s anticipated growth patterns, and establishes goals and policies to support the continuation of community services which promote the well-being of the City’s population. This Chapter includes the following sections:

- Parks and Special Use Facilities;
- Hiking and Riding Trails;
- Community Services Programs; and
- Health Lifestyles.

Resource Conservation Chapter

The Resource Conservation Chapter guides the preservation, protection, conservation, re-use, replenishment, and efficient use of Rancho Cucamonga's limited natural resources, including water, open space, sensitive habitat, agricultural lands, plus flora and fauna. This Chapter identifies strategies for maintaining the City's resources through a series of goals and policies aimed at preserving existing resources. The Chapter is divided into six sections that address:

- Open Space Resources;
- Water Resources;
- Energy Resources;
- Green Buildings;
- Mineral Resources; and
- Wildlife Resources.

Public Facilities and Infrastructure Chapter

The Public Facilities and Infrastructure Chapter addresses the needs for infrastructure and public facilities to support future growth in the Study Area and to maintain and enhance local quality of life. Specifically, this Chapter focuses on the provision of high-quality public facilities, support for educational opportunities, and maintenance and expansion of public infrastructure to meet planned growth. This Chapter is divided into the following key areas of discussion:

- Public Facilities;
- Schools and Educational Facilities;
- Library Services;
- Animal Care and Services; and
- Infrastructure.

Public Health and Safety Chapter

The Public Health and Safety Chapter provides a proactive approach to public health and safety issues. Specifically, it identifies potential known hazards (e.g., seismic and geologic hazards, hazardous materials, and flood hazards, among others) and provides methods for mitigating hazards through the planning process. In addition to the more common hazards to public health and safety, this Chapter addresses the need to maintain a safe environment by promoting sustainable living and by decreasing impacts related to global climate change by establishing goals and policies directed at encouraging programs such as renewable energy use, transit-oriented development, recycling, and green building. This Chapter is divided into the following areas of discussion:

- Fire and Emergency Services
- Crime Prevention
- Seismic and Geologic Hazards
- Flood Hazards and Inundation
- Wind Hazards
- Air Quality, Atmosphere, and Climate
- Noise

3.5 INTENDED USE OF THE EIR

3.5.1 CITY OF RANCHO CUCAMONGA

The City of Rancho Cucamonga is expected to use the information contained in this PEIR for consideration of approvals related to and involved in General Plan implementation over the long term. Potential actions to be considered by the City of Rancho Cucamonga for the Proposed Project may include, but not be limited to, those actions below.

Primary Discretionary Action

- Adoption of the General Plan Update, and
- Adoption of amendments to the Development Code and Zoning Map to achieve consistency with the General Plan.

Subsequent Discretionary and Ministerial Actions

In addition to the discretionary action listed above, subsequent actions by the City of Rancho Cucamonga to implement the General Plan Update may include:

- Capital Improvement Plans,
- Redevelopment activities,
- Subdivision Maps,
- Final Site Plans,
- Building Permits,
- Conditional Use Permits, and/or
- Other entitlement action(s) required by the Development Code for development proposals.

3.5.2 RESPONSIBLE AND TRUSTEE AGENCIES

The PEIR provides environmental information to responsible and trustee agencies and other public agencies that may be required to grant approvals or coordinate with the City of Rancho Cucamonga as a part of implementation of the General Plan Update. These agencies may include, but are not limited to, the following:

- South Coast Air Quality Management District;
- Regional Water Quality Control Board;
- School Districts;
- Flood Control District;
- California Department of Fish and Game; and
- Cucamonga Valley Water District.

SECTION 4.0 ENVIRONMENTAL SETTING, THRESHOLDS OF SIGNIFICANCE, ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, CUMULATIVE IMPACTS, AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Sections 4.1 through 4.17 of this Program Environmental Impact Report (PEIR) provide analysis of impacts for the environmental topics identified in Appendix G of the CEQA Guidelines (Title 14 of the *California Code of Regulations*). Each topical section includes the following information: description of the current regulatory setting; description of the existing environmental setting; 2010 General Plan Update Goals and Policies; Standard Conditions of Approval; identification of thresholds of significance; analysis of potential project effects; identification of cumulative impacts; identification of mitigation measures, if required, to reduce the identified impacts; and identification of the level of significance of impacts after mitigation, including unavoidable significant adverse impacts.

For each topical issue in this section, the impact analysis is formatted to analyze the potential impacts of the project related to each identified threshold of significance. Unless otherwise noted, the analysis under each threshold addresses impacts related to buildout of the 2010 General Plan Update Study Area within the City boundaries as well as within the City's designated Sphere of Influence.

The mitigation program identified to reduce potential project impacts consists of General Plan Goals and Policies, Standard Conditions of Approval (SCs), and mitigation measures (MMs). The components of the mitigation program are described below.

- **General Plan Goals and Policies.** The General Plan goals and policies are those which are included in the proposed 2010 General Plan Update that have been incorporated into the project to prevent the occurrence of, or to reduce the significance of, potential environmental effects. Because General Plan goals and policies have been incorporated into the project through inclusion in the proposed 2010 General Plan Update, they do not constitute mitigation measures as defined by CEQA. However, the appropriate goals and policies are identified for each topical issue along with a corresponding Implementation Action that describes how a policy will be implemented as a part of future projects. In the absence of the implementation of a goal or policy, a significant impact could occur.
- **Standard Conditions of Approval.** Existing requirements and standard conditions are based on local, State, or Federal regulations or laws that are frequently required independently of CEQA review and also serve to offset or prevent specific impacts. Typical SCs include compliance with the provisions of the California and local Building Codes, South Coast Air Quality Management District Rules, and local agency impact fees, among others. The City may impose additional conditions on the project during the approval process, as appropriate, including those that are standard to all projects, typical to a project of a particular nature, or specific to the proposal.
- **Mitigation Measures.** Where a potentially significant environmental effect has been identified and is not reduced to a level considered less than significant through the application of goals and policies and/or standard conditions and requirements, mitigation measures have been provided.

The City may substitute, at its discretion, any mitigation measure (and timing thereof) that has: (1) the same or superior result as the original mitigation measure and (2) the same or superior effect on the environment. The City of Rancho Cucamonga Planning Department, in conjunction

with any appropriate agencies or City departments, shall determine the adequacy of any proposed “environmental equivalent/timing” and, if determined necessary, may refer said determination to the Planning Commission. Any costs associated with information required in order to make a determination of equivalency/timing shall be borne by the property owner/developer.

4.0.1 APPROACH TO CUMULATIVE IMPACT ANALYSIS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed in an EIR where identified environmental impacts are potentially “cumulatively considerable,” which is defined in Section 15065(a)(3) as “significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” Section 15130(b)(1) states that the cumulative impact discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone; and should focus on the cumulative impact to which the identified other projects contribute.

The CEQA Guidelines Section 15130(b)(1) describes two allowable methods to determine the scope of projects considered in the cumulative impact analysis, as follows:

1. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or
2. A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

The cumulative impact analysis contained in this PEIR uses the second method, which focuses on regional projections. The proposed 2010 General Plan Update establishes policy to guide long-term (2030) development within the City of Rancho Cucamonga based on growth projections. Similarly, the Southern California Association of Governments’ (SCAG) growth projections (population, housing and employment), prepared as part of the Regional Transportation Plan (RTP), provide estimates of long-term development within the region. The City of Rancho Cucamonga is part of SCAG’s San Bernardino Associated Governments subregion¹ and the SCAG six-County region, in order of increasing geographic area. Therefore, the cumulative impact analysis in this EIR considers the environmental impacts from the proposed 2010 General Plan Update in combination with the potential environmental impacts of regional growth as projected through the year 2030. As such, this approach provides for consideration of the combined effect of similar impacts (e.g., growth-focused, long-term, program-level) within the same timeframe (through 2030) that could be cumulatively considerable, in compliance with CEQA Guidelines Section 15130(b)(1).

Table 4-1 summarizes the projected growth for the City of Rancho Cucamonga, the San Bernardino Associated Governments (SANBAG) subregion, and the SCAG region from the SCAG 2008 RTP between 2010 and 2030. Both the City of Rancho Cucamonga and SCAG region growth projections are provided for context. As noted above, the geographic context for the cumulative impact analysis, unless otherwise noted, is the SANBAG subregion. The six-

¹ The San Bernardino Associated Governments subregion includes all incorporated cities in the County as well as unincorporated San Bernardino County areas and includes Adelanto, Apple Valley, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa, and Yucca Valley.

county SCAG region would be too large a geographic area to effectively or reasonably assess cumulative impacts.

**TABLE 4-1
SCAG REGIONAL GROWTH PROJECTIONS USED IN CUMULATIVE
IMPACT ANALYSIS SCAG**

		2010	2030	Change
City of Rancho Cucamonga^a	Population	171,980	172,417	437 (0.3%)
	Housing	52,057	54,776	2,719 (5.2%)
	Employment	67,382	90,912	23,530 (35.0%)
San Bernardino Associated Governments Subregion	Population	2,182,049	2,957,753	775,704 (35.5%)
	Housing	637,250	914,577	277,327 (43.5%)
	Employment	810,233	1,134,960	324,727 (40.0%)
SCAG Region	Population	19,418,349	23,255,378	3,837,029 (19.6%)
	Housing	6,086,983	7,449,484	1,352,501 (22.4%)
	Employment	8,349,454	9,913,372	1,563,918 (18.7%)
^a Note that these projections may vary from the City of Rancho Cucamonga's projections described as part of the General Plan Update. These projections are provided here solely as context for the subregional projections, which include the City projections. Source: SCAG 2008a.				

Each environmental topic in Section 4.0 of this PEIR provides a “cumulative impacts” subsection that provides the topic-specific cumulative impact analysis.

In addition, Section 15130(b)(3) of the CEQA Guidelines states that “lead agencies shall define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used”. Unless otherwise indicated in each topical analysis in Section 4.0, the geographic scope includes the SANBAG subregion, for the reasons discussed above. However, there are environmental topics whose relevant geographic scope for purposes of cumulative impacts may be larger or smaller than this area, and may be defined by local, regional, or State agencies. One example of this is the geographic scope of cumulative air quality impacts, defined by the South Coast Air Quality Management District to encompass the South Coast Air Basin. Conversely, the geographic scope of cumulative aesthetics impacts is limited to anticipated regional growth within immediately adjacent jurisdictions that share viewsheds or lines of sight with the City of Rancho Cucamonga.

Table 4-2 summarizes the generalized geographic area(s) associated with the environmental topics addressed in Section 4.0, using the following categories: global, Statewide, regional (i.e., San Bernardino Associated Governments subregion), local (i.e., City of Rancho Cucamonga and adjacent jurisdictions) and other specific areas, as defined below.

**TABLE 4-2
 GEOGRAPHIC SCOPE OF CUMULATIVE IMPACT ANALYSIS**

Environmental Topic	Cumulative Geographic Area(s)
Aesthetics	Local
Agricultural Resources	Regional
Air Quality	Other (South Coast Air Basin)
Biological Resources	Local, Regional, and State (dependent on resource affected)
Climate Change	Global to Local
Cultural Resources	Regional
Geology and Soils	Local and Regional
Hazards and Hazardous Materials	Local
Hydrology and Water Quality	Other (watershed)
Land Use and Planning	Regional
Mineral Resources	Regional
Noise	Local and Regional
Population and Housing	Regional
Public Services	Local and Regional (dependent on coverage area of affected services)
Recreation	Regional
Transportation and Traffic	Local and Regional (dependent on methodology required by transportation agency)
Utilities and Service Systems	Regional and Local

Finally, this PEIR considers regional programs directed at mitigating cumulative impacts of development such as those instituted for urban runoff related to water quality impacts. Where there is a topic-specific geographic scope or an applicable regional program, these are discussed within the cumulative impact subsection of each environmental topic addressed in this PEIR.

4.1 AESTHETICS

This section describes the existing aesthetic character of the City of Rancho Cucamonga and views of and from the City. It also analyzes the potential aesthetic impacts that may occur with implementation of the proposed 2010 General Plan Update and future development and redevelopment projects allowed under the proposed Update within the Study Area.

Aesthetics generally refer to the identification of visual resources, the quality of one's view, and/or the overall visual perception of the environment. The issue of light and glare is related to both the creation of daytime glare due to the reflection of the sun (such as on glass surfaces) and/or an increase in nighttime ambient lighting levels (such as from building lights, street lights, and vehicle headlights). The information presented in this section is based on field reconnaissance and review of relevant portions of the proposed 2010 General Plan Update.

4.1.1 RELEVANT POLICIES AND REGULATIONS

State

Scenic Highway Program

The California Department of Transportation's (Caltrans) Scenic Highways Program (as contained in the *California Streets and Highways Code*, Sections 260 to 263) recognizes the visual resources and natural scenic beauty of California highways and adjacent corridors. These highways are designated based on the natural landscape seen by travelers, the scenic quality of the landscape, and the extent to which development is kept away from the corridor to preclude intrusion on the traveler's enjoyment of the view.

The program includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. The status of a scenic highway changes from eligible to officially designated when the local governing body applies to Caltrans for scenic highway approval and adopts a Corridor Protection Program that (1) regulates land use and density of development along the highway; (2) controls outdoor advertising; (3) provides guidelines for site planning; (4) controls earth-moving and landscaping activities; and (5) provides design guidelines for the appearance of structures and equipment. Caltrans approval leads to official designation and inclusion in the list of the State's Scenic Highways.

County

County of San Bernardino Scenic Routes

The *County of San Bernardino General Plan* identifies a number of scenic routes and the County desires to preserve the scenic character of these visually important roadways. Scenic routes within the valley area of the County (which includes the southwestern section of the County located south of the San Bernardino and San Gabriel Mountains) are located in the eastern section of the County near the cities of Loma Linda, Redlands, and Yucaipa and in the southwestern corner of the County. Other scenic routes are in the mountain and desert regions, where natural settings remain. The nearest scenic route is the I-15 freeway from its junction with the I-215 Freeway in the Cajon Pass, northeast to the Nevada State line. This segment is approximately 6.7 miles northeast of the boundary of the City of Rancho Cucamonga, outside of the City and SOI boundaries, and is not visible from the City or the SOI.

Wilson Avenue and Day Creek Boulevard were formerly designated as scenic routes by the County, but no scenic routes in or near the City of Rancho Cucamonga are identified in the County's current General Plan.

Local

Rancho Cucamonga General Plan

Chapter III of the 2001 Rancho Cucamonga General Plan - Developing the Community, addresses issues related to land use, transportation, housing, public facilities and services, community design, and economic development. Community design considerations in the General Plan include preservation of the City's cultural heritage, natural environment, and scenic views; the creation of a unified image, activity centers, attractive streetscapes, and distinctive neighborhoods; and innovative and quality design for the site planning, landscaping, and architectural design of new developments.

Rancho Cucamonga Development Code

Title 17 of the Rancho Cucamonga Municipal Code is the City's Development Code. The Code contains regulations that identify the permitted land uses on all parcels in the City through assigned districts. It also identifies applicable use regulations, site development criteria (e.g., lot size, density/intensity, yard setbacks, open space, heights, parking, landscaped areas), performance standards, and general design regulations (e.g., site design, building orientation, access, parking areas, landscaping, fencing/screening, lighting, building design).

Special Boulevards and Beautification Master Plans

The City's current and proposed General Plans designate a number of streets as Special Boulevards, which are developed with extensive landscape setback areas. The Special Boulevards include landscape and hardscape design, trails, and setback standards that are consistent with the development guidelines of adopted Specific Plans within the City. Special Boulevards in the City include the following:

- Haven Avenue
- Milliken Avenue
- Day Creek Boulevard
- Base Line Road
- Foothill Boulevard
- Arrow Highway
- Church Street
- 6th Street
- 4th Street
- Archibald Avenue
- Rochester Avenue
- Etiwanda Avenue
- East Avenue
- Wilson Street
- Victoria Parkway

The City has developed beautification master plans for designated Special Boulevards that are not addressed in adopted Specific Plans, as listed in Table 4.1-1.

**TABLE 4.1-1
BEAUTIFICATION MASTER PLANS**

Beautification Street	Elements Addressed by Concept
Archibald Avenue	Parkway/background/accent trees, perimeter walls
Base Line Road, west of Haven Avenue	Parkway/background/accent trees
Base Line Road, east of Haven Avenue	Parkway/background trees, entire median
Day Creek Boulevard	Parkway/background/accent trees, entire median, perimeter walls, community art
Haven Avenue	Parkway/background trees, entire median
Milliken Avenue	Parkway/background trees, entire median
4th Street	Parkway/background/accent trees, shrubs and hardscape
6th Street	Parkway trees, entire median
19th Street	Parkway/accent trees, perimeter walls
Source: Hogle-Ireland 2009.	

The Beautification Master Plans provide identifiable themes along major City streets; provide attractive, enduring and maintainable streetscapes; complement other community improvements; and protect the public's health, safety, and welfare.

In addition, the City has identified sections of Etiwanda Avenue, Hellman Avenue, and Hillside Road for special aesthetic treatment due to their historic character.

Foothill Boulevard/Historic Route 66 Visual Improvement Plan and Mural Program

The Foothill Boulevard/Historic Route 66 Visual Improvement Plan was adopted January 2002 and guides the design concepts for the streetscapes, entry areas, and rights-of-way along Foothill Boulevard/Historic Route 66 through the City. The plan establishes a set of unique and unifying historic themes, with specific design concepts for the westerly and easterly gateways into the City and for eight centers along the corridor. The plan also provides concepts for the Suburban Parkway enhancement areas at various locations, a palette of streetscape furniture, Route 66 icons, artwork, and other concepts that can be utilized in future development and improvements along the Boulevard.

In addition, the Foothill Boulevard/Route 66 Mural Program was developed by the City's Redevelopment Agency to create an aesthetically pleasing environment for residents and visitors and to increase interest and activity along Foothill Boulevard. The program is intended to provide cultural, educational, and artistic visual displays that depict the rich history of Rancho Cucamonga.

Landscape Maintenance Districts

The City has established Landscape Maintenance Districts (LMDs) for the maintenance of parkways and medians in the City. The districts feature water-conserving landscapes, and the City employs several strategies to reduce operation and maintenance costs within the LMD, while maintaining attractive, enduring landscapes.

Tree Preservation Ordinance

The City's Tree Preservation Ordinance (Chapter 19.08 of the Municipal Code) promotes the preservation of heritage trees as scenic and historical assets of the City. The ordinance establishes regulations for the preservation of heritage trees on private property, including

eucalyptus, palm, oak, sycamore, and pine trees. In particular, eucalyptus windrows¹ are considered a unique inheritance, and the City aims to protect selected Blue Gum Eucalyptus windrows and expand the windbreaks through planting new Spotted Gum Eucalyptus windrows along an established grid pattern throughout the City.

Water Efficient Landscaping Ordinance

In 2009, the City adopted a Water Efficient Landscaping Ordinance (Chapter 17.42) that meets the requirements of the Water Conservation in Landscaping Act of 2006 (AB 1881). The overarching theme of this ordinance is to design thoughtful, water efficient landscapes. Landscape water use accounts for more than 60 percent of all domestic water use within the City and the Chino Basin as a whole. While this ordinance is not designed to encourage or require desert-type landscaping, it does require a more scientific approach to landscape design by determining how much water should be used on a specific site and to use that as the basis for an appropriate landscape. The key component of this ordinance is the water budget – a calculation of how much water can be used on a landscape based on environmental factors. Once the water budget is established, an appropriate landscape can be created.

Sign Ordinance

The City's Sign Ordinance, Title 14 of the Municipal Code, balances the need for advertisement and identification of businesses with the creation of a desirable image for the City. The objectives of the ordinance are:

- To direct persons to various activities and enterprises in order to provide for the maximum public convenience;
- To provide a reasonable system of controls for signs to ensure the development of a high quality environment;
- To encourage signs which are well designed and pleasing in appearance and to provide incentive and latitude for variety, good design relationship, and spacing;
- To encourage a desirable urban character which has a minimum of overhead clutter;
- To enhance the economic value of the community and each area thereof through the regulation of such things as size, number, location, design, and illumination of signs;
- To encourage signs that are compatible with adjacent land uses;
- To reduce possible traffic and safety hazards through good signing; and
- To protect the general public health, safety, and welfare of the community.

This ordinance is implemented as part of the development and design review of individual development applications.

¹ A windrow is a continuous row of trees originally planted to create a windbreak or physical separation between two uses.

Wireless Communication Ordinance

The City's Wireless Communication Ordinance (as contained in Chapter 17.26 of the City's Municipal Code) regulates the siting, design and configuration of communication towers and antenna by promoting co-location of multiple facilities and creative design solutions to screen or hide views of the antenna and supporting structures.

Placing Utility Lines Underground

Section 16.36.090 of the Municipal Code requires all utilities within a subdivision and along peripheral streets to be placed underground except those facilities exempted by California Public Utilities Commission regulations. The City may accept a fee in lieu of placing existing facilities along peripheral streets underground. However, no in-lieu fee is allowed for new residential subdivisions.

Chapter 13.04 of the City's Municipal Code allows for the designation of underground utility districts if the City finds that removal and underground installation of utility lines would avoid or eliminate if (1) there is an unusually heavy concentration of overhead electric facilities; (2) a street carries a heavy volume of pedestrian or vehicular traffic; and (3) a street through a civic area or public recreation area or an area of unusual scenic interest.

Design Guidelines

The City has adopted design guidelines for residential developments to address the following:

- Site planning techniques for multi-family and single-family housing;
- A subdivision layout;
- Architectural guidelines;
- Grading techniques and standards;
- Landscaping guidelines;
- Fencing materials; and
- Trail design for pedestrian, bicycle, and equestrian use.

These guidelines are intended to develop residential developments that are pedestrian-oriented, to promote site planning that incorporates outdoor gathering areas such as plazas or courtyards, and to create streetscapes that encourage pedestrian and bicycle activity.

The City has also developed design guidelines for commercial and industrial developments (both neighborhood and community-level) to address site planning, architectural design, landscaping, sign programs, and master planning requirements.

Grading Ordinance

The City's Grading Ordinance is contained in Title 19, Environmental Protection - Chapter 19.04 of the Municipal Code. These regulations discourage mass grading and development of excessive slopes so as to retain the natural terrain; encourage preservation of significant topographic features; limit construction on identified seismic or geologic hazard areas; and

encourage variations in housing styles, lot sizes, design densities, and views. The ordinance calls for grading plans to be reviewed by a committee consisting of one representative from the Building and Safety Department, one representative from the Engineering Department, and one representative from the Planning Department. This committee reviews all grading plans for compliance with City standards and guidelines relating to grading practices for topography, drainage structures, slopes, irrigation, planting, building pad differential heights, accessibility, and other features or functions that meet this ordinance's objectives.

Hillside Development Regulations

The Development Code contains hillside development regulations in Chapter 17.24 of Title 17 to prevent the disturbance of natural slopes. Guidelines and development standards for site design, architecture, driveways/roadways, walls and fences, landscaping, grading, drainage, trails and corrals², public safety, and development density are included in these regulations for use in the review of developments on sites with slopes that are five percent or greater.

Grading for development is permitted in areas with slopes between 5.00 and 7.99 percent, but the natural character of landforms must be retained. According to the Development Code, contour grading, combined slopes, limited cut and fill, split level architectural prototypes, or padding for structures may be necessary to reduce the amount of grading, depending upon individual site conditions. Cluster development is encouraged to reduce disturbance areas.

Development within the Hillside Overlay District (areas generally located north of Hillside Avenue and areas around Red Hill and Beryl Hill), as shown on Exhibit 3-3 in Section 3.0, Project Description, or areas with slopes between 8.0 and 14.9 percent, are required to comply with hillside architectural and design techniques that minimize grading. The use of split level foundations greater than 18 inches, stem walls, stacking, and clustering is expected for these areas.

Development in areas with slopes between 15.0 and 29.9 percent grade is limited to the less visually prominent slopes and where it can be shown that safety, environmental, and aesthetic impacts can be minimized on a project-specific basis. Anticipated development in these areas would include large lots, variable setbacks, and variable building structural techniques (i.e., stepped or pole foundations). Structures should blend with the natural environment in terms of shape, materials, and colors. Roadways should follow natural contours or use grade separations.

Development is prohibited in areas with slopes 30 percent or greater, except for (1) parcels that are located south of Banyan Street; (2) where at least 75 percent of the lots or parcels of the development site are surrounded by lots or parcels improved with structures; and (3) the proposed development appropriately addresses slope stability and other on-site geological factors.

Light and Glare Regulations

Title 17 of the Development Code contains regulations for light and glare from temporary uses and from developments in residential, commercial and industrial districts; hillside residential areas; and districts along Foothill Boulevard. The regulations require lighting to be directed away from and shielded from adjacent residential areas and to prevent stray light or glare from becoming a nuisance on adjacent properties. Also, levels of spillover light and glare are

² Corrals for use with horses.

regulated in the performance standards for residential districts and parking areas to avoid creating areas of intense light or glare.

4.1.2 EXISTING CONDITIONS

Existing Development

The City of Rancho Cucamonga is largely developed and features a mix of old and new urban land uses at varying densities and intensities. Residential areas are mainly characterized by low-density neighborhoods developed with single-family detached units. Larger lots are located in the northern areas, with gradually smaller lots south of Banyan Street. Higher-density housing such as townhomes, condominiums, and apartment complexes are located in the central portion of the City in the Terra Vista and Victoria neighborhoods. The historic communities in the City include Alta Loma, Cucamonga, and Etiwanda, each with its own style of development and types of land uses. Northtown is also a historic neighborhood within the original Cucamonga community. Newer developments include the Terra Vista, Victoria, and Caryn communities, although some new development has occurred in nearly all portions of the City.

Commercial uses include commercial shopping centers on Foothill Boulevard (east of Haven Avenue) and a regional shopping center at Victoria Gardens (at Day Creek Boulevard, Foothill Boulevard, and the I-15 Freeway), and neighborhood shopping centers found at most major intersections. Financial and administrative offices, office condominiums, medical offices, and other general office uses are primarily located on Haven Avenue and near the Civic Center. Older neighborhood shopping centers are located in the western portion of the City.

Industrial developments are generally located south of Foothill Boulevard and include heavy industrial uses, warehouses, distribution centers, light industrial uses, and business parks. Most of the heavy industrial uses are located east of the I-15 Freeway, at the City's southeastern section.

Civic and public facilities are found in the southern section of the City and include government buildings, City Hall, the County courts complex, the post office, fire stations, and multi-purpose community facilities, as well as a County correctional facility. Open space areas, parks and recreation facilities, golf courses, and agricultural lands are found in scattered locations throughout the City.

Over 2,500 acres of vacant land remain in the City, with another 1,922 acres in the SOI. The vacant lands are located on scattered sites and are surrounded by urban developments, except for the larger parcels along and near Etiwanda Creek in the northeastern section of the City. Vacant lands in the SOI consist of large, contiguous parcels outside the Deer, Day, and East Etiwanda canyons and creeks.

Streetscapes and Gateways

Rancho Cucamonga is visible from roadways that lead into the City, as well as from the I-15 and SR-210 freeways. The City has installed gateway markers and entry monuments at major streets along its southern, eastern, and western borders and along the I-15 and SR-210 Freeways to serve as identification of entrances into the City, as shown on Exhibit 4.1-1, Entry Monuments. The markers follow the design elements that have been established since 1989 and create a unified theme for all gateways.

Major roadways in the City have enhanced treatments (such as landscaped medians, street lighting, street trees, bike and pedestrian paths, setback of adjacent structures, street

furnishings, and hardscape treatments) as part of the City's street beautification plans and Special Boulevard designation (refer to Exhibit 4.1-2, Roadway Treatments).

Travelers on the I-15 Freeway see views of business parks and industrial uses at the southeastern section of the City, which changes into regional commercial uses around Foothill Boulevard. Farther north on the freeway, the views are of single-family homes at the northeastern section of the City, with vacant lands near the SR-210 Interchange. Along the SR-210 Freeway, berms, block walls, and dense landscaping block most of the views of the City, except for partial views of commercial buildings near the ramps and near single-family homes in areas where the freeway is at-grade or above-grade. Homes at the foothills are also visible due to their higher elevations. These views are depicted on Exhibits 4.1-3, Views from the I-15 Freeway, 4.1-4, Views from the SR-210 Freeway, and 4.1-5, Views of the Foothill Areas.

Scenic Resources

The City sits at the southern base of the San Gabriel Mountains at the eastern end of the range. The San Bernardino Mountains are just east of the San Gabriel Mountains, divided by the Cajon Pass. Views of the San Gabriel and San Bernardino Mountains are available from most areas in the City and provide a scenic backdrop for the community, as shown in Exhibit 4.1-6, Views of Nearby Mountains. North-south roadways, such as Archibald, Haven, and Etiwanda Avenues, provide unobstructed views of the San Gabriel Mountains to the north and, from the foothills, of the lower-lying valley to the south.

The City recognizes other scenic resources, including remaining stands of eucalyptus windrows, scattered vineyards and orchards, and natural vegetation in flood-control channels and utility corridors, as shown in Exhibit 4.1-7, Scenic Resources. The foothills at the northern end of the City provide views of wide open spaces, steep slopes, and natural vegetation, with limited development.

Scenic Highways

No designated scenic highways are present in or near the City of Rancho Cucamonga. The nearest officially designated scenic highway is State Route (SR) 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains and approximately 12 miles from the northern City boundary. Another designated scenic highway is the SR-38 (Rim of the World Scenic Highway), which is approximately 24 miles east of the City's boundary. These scenic highways are located on the western, northern, and eastern slopes of the San Gabriel and San Bernardino Mountains, far from the City of Rancho Cucamonga and its Sphere of Influence.

Highways eligible for Scenic Highway designation include SR-38 from SR-2 near Wrightwood to the SR-18 near Mount Anderson (approximately 10 miles north of the City of Rancho Cucamonga); and SR-39 from the SR-210 Freeway near Azusa to the SR-2 (approximately 13 miles west of the City). Other eligible scenic highways (the I-10 Freeway between SR-38 and SR-62 and the I-15 Freeway south of the SR-91 Freeway and north of SR-58) are farther away. These eligible scenic highways are not visible from the City nor are areas in the City or SOI visible from these scenic highways.

4.1.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on aesthetics if it would:



Entry monument on Archibald Avenue.



Entry monument on Haven Avenue.



Entry monument on Foothill Boulevard.



Entry monument on Day Creek Boulevard.

Entry Monuments

Rancho Cucamonga General Plan Update

Exhibit 4.1-1

Bonterra
CONSULTING



Median on Haven Avenue.



Parkway on Day Creek Boulevard.



Sidewalk on Milliken Avenue.



Trail fencing.

Roadway Treatments

Rancho Cucamonga General Plan Update

Exhibit 4.1-2

Bonterra
CONSULTING



Industrial uses along I-15 Freeway.



Residential uses along I-15 Freeway.

Views from the I-15 Freeway

Exhibit 4.1-3

Rancho Cucamonga General Plan Update

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Residential areas north of I-210 Freeway.



Berm along I-210 Freeway.

Views from the I-210 Freeway

Exhibit 4.1-4

Rancho Cucamonga General Plan Update

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Foothill development east of Day Creek.



Northern end of Haven Avenue.

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Views of the Foothill Areas

Exhibit 4.1-5

Rancho Cucamonga General Plan Update

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San Gabriel Mountains to the north.



San Bernardino Mountains to the east.

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Views of Nearby Mountains

Exhibit 4.1-6

Rancho Cucamonga General Plan Update

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Existing vineyard.



Orange Grove.



Eucalyptus windrow.

Scenic Resources

Rancho Cucamonga General Plan Update

Exhibit 4.1-7

Bonterra
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- Threshold 4.1a:** Have a substantial adverse effect on a scenic vista;
- Threshold 4.1b:** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- Threshold 4.1c:** Substantially degrade the existing visual character or quality of the site and its surroundings; and/or
- Threshold 4.1d:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address the protection of the aesthetic and visual resources in the City. Implementation of these goals and policies would maintain or improve views in and of the City, ensuring the aesthetic qualities of future development. Applicable goals and related policies are identified below in italics. Each goal and policy is followed by an implementation action which identifies the programs and procedures that will be used to put General Plan goals and policies into action.

GOAL LU-1: Ensure established residential neighborhoods are preserved and protected, and local and community-serving commercial and community facilities meet the needs of residents.

Policy LU-1.4: Continue code enforcement activities to ensure proper maintenance of homes, buildings, yards, and neighborhoods in all areas of the City, and work with businesses and homeowners to gain compliance.

Implementation Action: Continue to enforce property maintenance standards, noise regulations, and other property related regulatory standards adopted by the City.

GOAL LU-2: Facilitate sustainable and attractive infill development that complements surrounding neighborhoods and is accessible to pedestrians, bicycles, transit, and automobiles.

Policy LU-2.1: Plan for vibrant, pedestrian-friendly mixed use and high-density residential areas at strategic infill locations along transit routes.

Implementation Action: Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.

Policy LU-2.4: Promote complementary infill development, rehabilitation, and re-use that contribute positively to the surrounding residential neighborhood areas.

Implementation Action: Develop guidelines or standards that are specific to potential infill development sites to ensure that developers have considered the individual needs of the community and unique characteristics of the aesthetics, particularly those lots identified within each of the specific Mixed Use designations.

GOAL LU-3: Encourage sustainable development patterns that link transportation improvements and planned growth, create a healthy balance of jobs and housing, and protect the natural environment.

Policy LU-3.6: Create focused, pedestrian-friendly neighborhoods that are reminiscent of the qualities found in earlier days, particularly within the original communities of Cucamonga, Alta Loma, and Etiwanda, and along Historic Route 66 (Foothill Boulevard).

Implementation Action: Continue to identify, prioritize, and install streetscape and landscape amenities that provide pleasant and comfortable streets, enhance City identity, and promote walking.

Policy LU-3.9: Facilitate revitalization of aging commercial centers by working with property owners, developers, local businesses, and other community organizations to coordinate efforts.

Implementation Action: Review and modify previously adopted Specific Plans and Community Plans to ensure that the plans remain consistent with updates to the General Plan and provide for standards for redevelopment or rehabilitation versus new development proposals.

Policy LU-4.5: Continue to reinforce the identity of the intersection of Foothill Boulevard and Haven Avenue by supporting development projects that are comparable to the quality of the Civic Center and County Courthouse complex, Terra Vista Town Center, and the adaptive re-use of the historic Virginia Dare Winery.

Implementation Action: Establish clear public realm and private property improvements that are required for the intersection, either through a Specific Plan amendment or a zoning overlay.

Policy LU-5.2: Encourage development along the Haven Avenue Corridor that incorporates appropriate intensity and design excellence for an important gateway to Rancho Cucamonga.

Implementation Action: Review and update, as necessary, design guidelines for the Haven Avenue Corridor to ensure that the City's high standards for design are focused on the creation of the gateway.

Policy LU-5.3: Promote the Haven Avenue Corridor as a distinctive, attractive, and pleasant office park atmosphere that caters to professional, technological, and similar businesses in a campus-like setting with a prestigious identity.

Implementation Action: Review and update, as necessary, design guidelines for the Haven Avenue Corridor to ensure that the City's high standards for design are focused on the creation of the gateway.

Policy LU-5.5: Require development to provide courtyards and plazas, public art, and landscaped open spaces that promote safe and convenient pedestrian movement with continuous landscaped pathways between buildings and along Haven Avenue.

Implementation Action: Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.

GOAL LU-8: Encourage visually attractive hillsides where the natural environment is protected, a sustainable level of development is ensured, and appropriate measures to protect against hazards are in place.

Policy LU-8.1: Regulate development on natural slopes of eight percent grade or greater through the City's Hillside Development Ordinance.

Implementation Action: Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.

Policy LU-8.2: Approve only those residential densities that do not exceed the capacity of the land or the ability to reasonably provide public services and adequate public safety.

Implementation Action: Continue to utilize the adopted hillside regulations to limit residential densities.

Policy LU-8.4: Prohibit extensive disturbances and scarring of ridgelines and other distinctive landforms in the hillsides.

Implementation Action: Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.

Policy LU-8.5: Protect natural resources and sensitive habitat areas, and avoid encroachment from new hillside development.

Implementation Action: Continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies with purview over natural resources and sensitive habitats.

Policy LU-8.6: Require that hillside development minimize alteration of natural landforms, and encourage clustering where feasible to retain maximum open space.

Implementation Action: Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.

Policy LU-8.7: Blend hillside development with natural surroundings through architecture and the use of appropriate construction materials, colors, and natural vegetation.

Implementation Action: Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.

Policy LU-8.8: Provide conveniently located places to experience nature in the northerly reaches of the Planning Area, particularly through trail extensions and educational programs.

Implementation Action: As open space areas within the City's Sphere are incorporated, the trails systems within this area should be expanded, designed for educational experiences, and dedicated for public use.

Policy LU-8.10: Hillside development shall be controlled by customized regulations.

Implementation Action: Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.

GOAL LU-9: Foster a cohesive, healthy community through appropriate patterns and scales of development, including complementary transitions between districts, neighborhoods, and land uses.

Policy LU-9.1: Preserve and enhance the special qualities of existing districts and neighborhoods through focused attention on land use, community design, and economic development.

Implementation Action: Develop specific neighborhood preservation plans and/or design guidelines for identified neighborhoods and districts. Inventory and address the needs within the distinct districts to prioritize improvements that would further enhance each area.

Policy LU-9.2: Integrate districts and neighborhoods into the overall City structure and image.

Implementation Action: Develop specific neighborhood preservation plans and/or design guidelines for identified neighborhoods and districts. Inventory and address the needs within the distinct districts to prioritize improvements that would further enhance each area. Also, ensure that public improvements are carried out with well-defined linkages, open space, and landscape themes.

Policy LU-9.3: As the City revitalizes areas through redevelopment and infill development, provide a transition between the developed and natural (unbuilt) environment through landscaping techniques, open space linkages, preservation of landforms, sensitive site planning, architectural design, and public art.

Implementation Action: Ensure that the Design Guidelines are implemented whether the project consists of public or private improvements.

Policy LU-9.4: Ensure that infill development is sensitive and compatible with the design and scale of all adjacent historic properties.

Implementation Action: Develop guidelines or standards that are specific to potential infill development sites to ensure that developers have considered the individual needs of the community and unique characteristics of the aesthetics, particularly those lots identified within each of the specific Mixed Use designations.

Policy LU-9.5: Establish mixed-use areas as higher intensity “urban centers” where there is sensitive integration of land uses, convenient modes of transportation, and a focused “sense of place” that emanates from the architectural and landscape design.

Implementation Action: Review and modify the Design Guidelines to include principles for development within the Mixed Use designations.

Policy LU-9.6: Maintain the rural development pattern and character of the Etiwanda area through the Etiwanda Specific Plan.

Implementation Action: Continue to apply all standards, requirements, and guidelines to development within the Etiwanda Specific Plan.

GOAL LU-10: *Encourage sustainable landscaping and streetscape design.*

Policy LU-10.4: Encourage streetscape design and landscaping programs for commercial frontages that create vibrant places which support walking, bicycling, transit, and sustainable economic development.

Implementation Action: Adopt a sustainable development program that incorporates green building standards.

Policy LU-10.5: Consult with and coordinate with the Santa Fe Railway to develop and install a landscape plan for the enhancement of the railroad right-of-way.

Implementation Action: Inventory and assess the landscaping needs of the rail corridor, and consult with the rail agency to develop a plan.

Policy LU-10.6: Continue to pursue strategies to reduce long-term operation and maintenance costs within the City's Landscape Maintenance Districts and other publicly funded areas.

Implementation Action: Inventory and prioritize the removal of turf areas within landscape medians to be replaced with plantings that reduce long-term operations and maintenance costs.

GOAL LU-11: *Ensure that community aesthetics are maintained through appropriate regulations.*

Policy LU-11.1: Continue to implement and update as necessary the City's Sign Ordinance in order to provide for a reasonable system of review and incentives for well-designed signs throughout the City.

Implementation Action: Establish a periodic review schedule of all City ordinances that govern aesthetics to determine if industry standards have changed or if other objectives are desirable that require amendments.

Policy LU-11.2: Continue to require the undergrounding of utility lines and facilities wherever feasible to minimize the unsightly appearance of overhead utility lines and utility enclosures.

Implementation Action: Require undergrounding of utilities for new development. Develop a strategy and prioritization list for the undergrounding utilities in developed areas.

Policy LU-11.3: Require communication towers to be located and designed to blend with the surrounding environment.

Implementation Action: Review and update design guidelines for the siting and general appearance of communication towers to facilitate the least amount of visual intrusion. Emphasize use of stealth and architecturally integrated antenna.

GOAL LU-12: Foster a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga.

Policy LU-12.1: Ensure that streetscape design along roadways creates a strong landscaped edge, provides a coherent high-quality appearance along each route, and enhances the image of adjacent development.

Implementation Action: Adopt a sustainable development program that incorporates green building standards.

GOAL LU-13: Take full advantage of view lines and vista points with carefully designed development.

Policy LU-13.1: On north-south roadways, open space corridors, and other locations where there are views of scenic resources, trees, and structures, encourage framing and orientation of such views at key locations, and endeavor to keep obstruction of views to a minimum.

Implementation Action: Review development proposals to ensure that design guidelines, including sites within view corridors, have been applied to address siting of buildings and other vertical elements to retain views of local visual resources.

GOAL LU-14: Support public art as an important amenity of a beautiful city.

Policy LU-14.1: Pursue the placement of public art in prominent locations particularly along major travel corridors.

Implementation Action: Continue to require art as a condition of approval for projects at key locations, and continue to seek funding to provide public art within public rights-of-way, including the Metrolink corridor.

Policy LU-14.2: Continue to promote the establishment of entry monumentation as a means of identifying community, district, and neighborhood.

Implementation Action: Identify timing for implementation of the remaining monumentation within the City, including the addition of SR-210 and Day Creek Boulevard.

Policy LU-14.3: Incorporate a public art ordinance in the Development Code.

Implementation Action: Investigate the types and locations of projects, both new and redevelopment, where the adoption of a public art ordinance would provide the greatest aesthetic impact. Adopt and implement the ordinance.

Policy LU-18.1: Prepare a Cultural Landscape Report.

Implementation Action: Create a comprehensive plan for local cultural landscape preservation to complement architectural preservation efforts, including the update of existing surveys of historic resources.

Policy LU-18.2: Update files for identified historic resources to include extant cultural landscape features.

Implementation Action: Create a comprehensive plan for local cultural landscape preservation to complement architectural preservation efforts, including the update of existing surveys of historic resources.

Policy LU-18.3: Create a conservation easement program for cultural landscapes.

Implementation Action: Develop an application and process for the creation and use of conservation easements.

Policy LU-18-4: Continue to rebuild agricultural landscapes.

Implementation Action: Through the development review process, encourage incorporation of historic landscape features such as vineyards, fruit trees, and windbreaks into new development projects.

Policy LU-18.5: Retain and restore windbreaks where appropriate.

Implementation Action: Through the development review process, encourage incorporation of historic landscape features such as vineyards, fruit trees, and windbreaks into new development projects.

Policy LU-19.1: Identify historic districts and Neighborhood Character Areas (NCAs).

Implementation Action: Include the identification of boundaries for potential historic district designations as part of the preparation of the updated historic survey.

Policy LU-19.2: Create new and modify existing specific plans to guide development of historic districts and Neighborhood Character Areas (NCAs).

Implementation Action: Review and amend Specific Plans to address potential development proposals within historic districts.

Policy LU-19.3: Evaluate post-World War II buildings for historic significance.

Implementation Action: Include the evaluation of eligible residential building tracts as part of the preparation of the updated historic survey.

Policy LU-20.1: Create a historic resource interpretation program aimed at enhancing both public awareness of local history and opportunities for heritage tourism.

Implementation Action: Inventory the types of educational and awareness programs regarding historic resources already in place, and review methods for expanding the number of sites and available information.

Policy LU-21.1: Evaluate Route 66 properties and designate Route 66-related historic resources.

Implementation Action: Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.

Policy LU-21.2: Amend existing Foothill Boulevard Specific Plan (Development Code §17.32) to include a linear Route 66 Neighborhood Character Area (NCA).

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

Policy LU-21.3: Clarify the Foothill Boulevard Specific Plan and Route 66/Foothill Boulevard Visual Improvement Plan/Foothill Boulevard/Route 66 Mural Program to include policies that prioritize preservation of documented historic character of Route 66.

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

4.1.5 STANDARD CONDITIONS OF APPROVAL

The City has existing regulations that relate to aesthetics and visual quality, compliance with which would reduce negative aesthetic impacts. Compliance with these regulations would be required for all new development and redevelopment in the City. These include those listed below.

- SC 4.1-1** Future development and redevelopment within the City shall comply with the City's Grading Ordinance, as contained in the Rancho Cucamonga Municipal Code (Title 19 Environmental Protection, of Chapter 19.04). This ordinance requires the submission of grading plans for approval by the grading committee to ensure that grading activities (1) retain the natural terrain; (2) preserve significant topographic features; and (3) limit construction on identified seismic or geologic hazard areas in the City's hillside areas.
- SC 4.1-2** Future development and redevelopment within the City shall comply with the City's Hillside Development Regulations, which are found in Chapter 17.08 of the Development Code. These regulations require that development within the Hillside Residential District, in the Hillside Overlay Zone, or on sites with slopes 8 percent or greater comply with the Guidelines and development standards for site design, architecture, driveways/roadways, walls and fences, landscaping, grading, drainage, trails and corrals, public safety, and development density. These regulations seek to prevent the disturbance of natural slopes.
- SC 4.1-3** In accordance with its Water Efficient Landscaping Ordinance, the City shall continue to evaluate proposed landscape and irrigation plans and to determine if they meet the requirements of the ordinance and can be approved. This ordinance will allow the establishment of landscaped areas that are visually appealing and drought resistant.
- SC 4.1-4** Future development and redevelopment within the City shall comply with the City's Tree Preservation Ordinance in order to preserve mature trees in the City, which are considered scenic and cultural assets.
- SC 4.1-5** Future development and redevelopment within the City shall comply with the City's Light and Glare regulations, which are found throughout the Development

Code and require lighting to be directed away and shielded from adjacent residential areas. The regulations also prohibit the creation of areas with intense light or glare. As discussed above, the regulations call for the use of fences, walls, berms, screens, and landscaping to reduce light and glare spillover. The regulations are included under the special development criteria, performance standards, general design guidelines, special use regulations, and development standards for land uses in different development districts to prevent light and glare impacts on adjacent properties.

- SC 4.1-6** The Foothill Boulevard/Route 66 Visual Improvement Plan and Mural Program shall be implemented through future development and redevelopment along Foothill Boulevard to enhance the streetscape and to create a unified theme for this major corridor in the City.
- SC 4.1-7** Future development and redevelopment within the City shall comply with the City's Beautification Master Plans for designated Special Boulevards, as well as design guidelines for these Special Boulevards in existing and future specific plans.
- SC 4.1-8** The Rancho Cucamonga General Plan regulates all land uses in the City. Consistency with the goals, policies and programs related to community design in the Rancho Cucamonga General Plan, as amended, shall be required for all development projects.
- SC 4.1-9** Future development and redevelopment within the City shall comply with the City's Development Code, which provides development standards and design guidelines for different development districts. Future development and redevelopment projects shall comply with applicable design guidelines in the Development Code.
- SC 4.1-10** Future development and redevelopment within the City shall comply with the City's Design Guidelines for Residential and Commercial-Industrial land uses that promote quality development in new development and redevelopment projects. These design guidelines address site planning, subdivision layout, architecture, grading, landscaping, fencing, trails, sign programs, and master planning requirements. They are used in the design review of individual development proposals that are submitted to the City for approval.
- SC 4.1-11** Future development and redevelopment within the City shall comply with the City's Sign Ordinance in order to limit the visual clutter and improve streetscapes in the City by regulating the size, color, location, number, design, lighting, and types of signs that are installed in the City.
- SC 4.1-12** As part of the City's Landscape Maintenance Districts, parkways and public landscapes in the City shall be continually maintained to enhance the City's positive visual image.
- SC 4.1-13** Future development and redevelopment within the City shall comply with the City's Wireless Communication Ordinance to avoid the visual incompatibility of communication towers and antennas with the local streetscape or with views of the City from freeways and major roadways. Siting, design, and configuration standards shall limit the number of communication towers and antennas in the City and/or screen them from public views.

- SC 4.1-14** A detailed on-site lighting plan, including a photometric diagram, shall be reviewed and approved by the Planning Director and Police Department (477-2800) prior to the issuance of building permits. Such plan shall indicate style, illumination, location, height, and method of shielding so as not to adversely affect adjacent properties.
- SC 4.1-15** Solar access easements shall be dedicated for the purpose of assuming that each lot or dwelling unit shall have the right to receive sunlight across adjacent lots or units for use of a solar energy system. The easements may be contained in a Declaration of Restrictions for the subdivision which shall be recorded concurrently with the recordation of the final map or issuance of permits, whichever comes first. The easements shall prohibit the casting of shadows by vegetation, structures, fixtures, or any other object, except for utility wires and similar objects, pursuant to Development Code Section 17.08.060-G-2.

4.1.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment in the City pursuant to the proposed 2010 General Plan Update would introduce new structures and site improvements that would change the visual quality of individual sites and the surrounding areas, as well as add new sources of light and glare.

Scenic Vistas

Threshold 4.1a: Would the proposed General Plan Update have a substantial adverse effect on a scenic vista?

Scenic vistas in and near the City include views of the nearby San Gabriel and San Bernardino Mountains to the north and northeast. Future development and redevelopment could create obstructions to the views of land uses located immediately south of individual development sites. Depending on the building heights of new structures, some views of the mountains may be partially blocked, including views of the foothills at lower elevations. Building separation and setback requirements pursuant to the City Code for individual structures would preserve some distant mountain views and prevent total view obstruction. The mountains rise to heights over 6,000 feet above mean sea level (msl) and will remain partially visible from most areas of the City, despite future development pursuant to the proposed 2010 General Plan Update.

Goal LU-13 in the Managing Land Use, Community Design, and Historic Resources Chapter of the proposed 2010 General Plan Update seeks to take full advantage of view lines and vista points with carefully designed development. Under this goal, Policy LU-13.1 encourages minimizing view obstruction through framing and orientation of views at key locations on north-south roadways, open space corridors, and other locations where views of scenic resources, trees, and structures are present. Compliance with this goal and policy would reduce impacts relative to mountain views.

The foothills at the northern end of the City and in the SOI provide views of wide open spaces, steep slopes, and natural vegetation, with limited development. Residential development in the foothills would change these views. The City's Grading Ordinance (SC 4.1-1), Hillside Development Regulations (SC 4.1-2), Water Efficient Landscaping Ordinance (SC 4.1-3), Tree Preservation Ordinance (SC 4.1-4), and Lighting Standards (SC 4.1-5) would limit the density, intensity, and visual intrusion of development at the foothills while preserving the existing topography and natural vegetation. These standard conditions would also limit the introduction of overhead utility lines and light sources, retaining the area's rural character.

Goal LU-8 in the proposed 2010 General Plan Update encourages visually attractive hillsides where (1) the natural environment is protected, (2) a sustainable level of development is ensured, and (3) appropriate measures to protect against hazards are in place. Supporting policies include Policy LU-8.1 (Hillside Development Ordinance); Policy LU-8.2 (land capacity, available services and adequate public safety); Policy LU-8.4 (limit scarring of ridgelines and distinctive landforms); Policy LU-8.5 (natural resources and sensitive habitats); Policy LU-8.6 (clustering for more maximum open space); Policy LU-8.7 (blending with the natural surroundings); Policy LU-8.8 (places to experience nature); and Policy LU-8.10 (hillside regulations).

Impacts to other scenic resources—such as eucalyptus windrows, scattered vineyards, and natural vegetation in flood-control and utility corridors—would be reduced through compliance with the City’s Water Efficient Landscaping Ordinance (SC 4.1-3) and Tree Preservation Ordinance (SC 4.1-4). Despite implementation of and compliance with applicable standard conditions and general plan goals and policies, impacts on a scenic vista would remain significant and unavoidable.

Impact 4.1a: Future development and redevelopment could change views of the San Gabriel and San Bernardino Mountains, the foothill areas, and areas with eucalyptus windrows, scattered vineyards, and natural vegetation. Compliance with goals LU-8, LU-13, LU-18, LU-19, LU-20, and LU-21 and supporting policies in the Land Use, Community Design, and Historic Resources Chapter of the proposed 2010 General Plan Update and with SCs 4.1-1 through 4.1-5 would reduce impacts; however, a significant and unavoidable impact would occur.

Scenic Highways

Threshold 4.1b: Would the proposed General Plan Update substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed above, there are no scenic highways in or near the City or the SOI that could be affected by future development pursuant to the proposed 2010 General Plan Update. Views of the City from the I-15 and SR-210 freeways would change with future development and redevelopment under the proposed 2010 General Plan Update, although these freeway segments are not designated scenic highways. Thus, no impacts on scenic highways would occur.

While not a designated scenic highway, Foothill Boulevard is considered a historic route by many. Changes in views along Foothill Boulevard/Route 66 may occur with future development and redevelopment along this corridor. However, the City’s Foothill Boulevard/Route 66 Visual Improvement Plan and Mural Program (SC 4.1-6) and Special Boulevard designation (SC 4.1-7) regulate the frontage of developments and the streetscape along this roadway to promote an attractive corridor for travelers and visitors. Compliance with these standard conditions would prevent adverse aesthetic impacts along Foothill Boulevard.

Impact 4.1b: There are no scenic highways in or near the City, which may be affected by future development and redevelopment under the proposed 2010 General Plan Update. Adherence to SCs 4.1-6 and 4.1-7 would ensure that impacts would occur.

Visual Character and Quality

Threshold 4.1c: Would the proposed General Plan Update substantially degrade the existing visual character or quality of the site and its surroundings?

Visual Quality

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would change the visual quality of individual development sites, as structures and site improvements are introduced on vacant and undeveloped lands and as older developments are replaced with newer structures and site improvements. This change would lead to greater urbanization within the Study Area, with the proposed introduction of 7,584 new homes and approximately 19.77 million square feet of non-residential development. These developments would change the overall visual quality of the City.

The Managing Land Use, Community Design, and Historic Resources Chapter of the proposed 2010 General Plan Update conveys the City's goals and policies for visually appealing community design. Specifically, Goal LU-2 facilitates sustainable and attractive infill development that complements surrounding neighborhoods and is accessible to pedestrians, bicycles, transit, and automobiles. Supporting policies call for vibrant, pedestrian-friendly, mixed-use and high-density residential areas; complementary infill development; focused, pedestrian-friendly enclaves; revitalization of aging commercial centers; and reinforcement of corridor identities and gateways.

Goal LU-8 calls for visually attractive hillside development, with supporting policies to regulate development intensities on steep slopes; prohibits disturbances of ridgelines and natural landforms; strives to protect natural resources and sensitive habitats; encourages clustering; and blends development with the natural surroundings.

Goal LU-9 fosters a cohesive, healthy community through appropriate patterns and scales of development, including complementary transitions between districts, neighborhoods, and land uses. Supporting policies call for enhancing the special qualities of existing districts and neighborhoods; integrating districts and neighborhoods into the overall City structure and image; revitalizing older areas; creating compatible infill development; incorporating urban centers with a focused "sense of place"; maintaining rural character of the Etiwanda area; creating vibrant places; enhancing the railroad right-of-way; and establishing Landscape Maintenance Districts.

Goal LU-11 ensures that community aesthetics are maintained through appropriate regulations. Supporting policies include the City's Sign Ordinance; of the ordinance to place utility lines and facilities underground wherever feasible; and communication towers that blend with the surrounding environment.

Additionally, the City would have to review and approve the site plans of individual development and redevelopment projects for compliance with the goals and policies of the City's General Plan (SC 4.1-8), applicable design guidelines for different development districts under SC 4.1-9, and the Residential and Commercial/Industrial Design Guidelines under SC 4.1-10.

Despite compliance with goals and policies in the proposed 2010 General Plan Update and applicable design guidelines (SCs 4.1-9 and 4.1-10), the change in visual quality from future development and redevelopment under the proposed 2010 General Plan Update is considered a significant adverse aesthetic impact.

Public Views

Future development and redevelopment under the proposed 2010 General Plan Update would change public views along roadways and freeways in and near the City. New streets may be developed as part of new development, existing streets may be improved with new development and redevelopment, or building facades may be replaced or revised for redevelopment projects. These actions would change views along major streets and gateways in the City.

Goal LU-12 in the Managing Land Use, Community Design, and Historic Resources Element of the proposed 2010 General Plan fosters a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga. Supporting policies call for streetscape design with a strong landscaped edge, high-quality appearance, and image and transit stops that are compatible with adjacent development.

Goal LU-14 supports public art as an important amenity of a beautiful city, with supporting policies for the placement of public art along major travel corridors; establishment of entry monumentation; and a public art ordinance in the Development Code. In addition, Policy LU-1.4 calls for code enforcement for proper maintenance of existing developments.

Also, compliance with the streetscape and landscaping standards and design guidelines would reduce the appearance of visual clutter along roadways. Specifically, future development and redevelopment would need to comply with the City's Sign Ordinance (SC 4.1-11), the Foothill Boulevard/Route 66 Visual Improvement Plan and Mural Program (SC 4.1-6), Special Boulevards and Beautification Master Plans (4.1-7), Landscape Maintenance Districts (SC 4.1-12), and Wireless Communication Ordinance (SC 4.1-13). Despite compliance with these standard conditions and goals and policies, impacts related to changes in visual quality would remain significant and unavoidable.

Impact 4.1c: Changes in visual quality from future development and redevelopment under the proposed 2010 General Plan Update would be significant. Compliance with goals and policies of the Managing Land Use, Community Design, and Historic Resources Element of the proposed 2010 General Plan Update and SCs 4.1-6 through 4.1-13 would reduce impacts; however, impacts would remain significant and unavoidable.

Light and Glare

Threshold 4.1d: Would the proposed General Plan Update create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Future development and redevelopment under the proposed 2010 General Plan Update would be accompanied by new sources of light and glare. These would include streetlights on planned roadways and abutting roadways, exterior security lighting, lighted signs, parking lot lighting, and pedestrian pathway lighting. These new light sources would result in an increase in the lighting levels of individual sites and the surrounding areas, which may impact adjacent land uses, especially residences. However, any new light sources would be confined to the individual future project sites and abutting streets to the extent possible and would not significantly affect adjacent areas, with compliance with the City's light and glare regulations (SC 4.1-5). Additionally future development shall comply with SCs 4.1-14 and 4.1-15 that require a lighting plan and solar access easements.

The buildings could also create new sources of glare in the form of glazed building surfaces, use of mirrors and glass as exterior building surfaces, and other reflective materials that would reflect the sun or light sources and create glare. However, the City's light and glare regulations (SC 4.1-5) prohibit the creation of areas of intense light and glare through the use of fences, walls, berms, screens, and landscaping to reduce light and glare spillover, as the City also has regulations for outdoor lighting poles and fixtures for allowable illumination and glare levels, standards for exterior lighting and lighted signs, and parking lot lighting regulations, with which all future developments would need to comply. Also, setback requirements for structures would provide distance separation from building materials with glare potential and adjacent streets and buildings. Thus, compliance with the City's lighting standards would prevent significant adverse light and glare impacts.

Impact 4.1d: New sources of light and glare that would accompany future development and redevelopment under the proposed 2010 General Plan Update would need to comply with the City's lighting standards (SC 4.1-5) to prevent spillover onto adjacent properties prepare a lighting plan (SC 4.1-14) and maintain adequate solar easements to allow adequate sunlight (SC 4.1-15). Impacts would be less than significant.

4.1.7 CUMULATIVE IMPACTS

The cumulative impact analysis on aesthetics is based on potential changes in the visual quality in the City, the SOI, and the surrounding area.

More intense urban development in the City of Rancho Cucamonga and in the adjacent cities and unincorporated County area is expected as vacant land is used for development of new residential, commercial, light industrial and other institutional or public land uses, or the redevelopment of existing, older structures. These future developments and redevelopments would alter the visual quality of the landscape through the introduction of structures in currently open areas and the redevelopment of older structures to other land uses or with higher density/intensity uses. Future developments would contribute to the cumulative loss of undeveloped land in the City and adjacent cities, and in San Bernardino County.

The transition from vacant land and lower density development to urban structures reflects the urbanizing trend that has occurred in Rancho Cucamonga and in the surrounding communities during the past decade. As vacant lands are developed and replaced with residential tracts or commercial, institutional, public, and industrial uses, views of the area would change from an area in transition to one that is fully developed. These changes would include the introduction of new structures, parking lots, landscaped areas, parks, outdoor signs, and other infrastructure improvements, creating an overall higher development intensity and urbanized setting for the area in and near Rancho Cucamonga and in southwestern San Bernardino County.

Development and design review of individual development projects by surrounding cities and the County and compliance with applicable design standards and guidelines by individual development projects would reduce visual impacts; however, these impacts would remain cumulatively significant.

There are no scenic highways in the surrounding area that would be affected by development. Thus, cumulative impacts to scenic resources in the vicinity of a scenic highway are not expected to occur.

New sources of light and glare would be introduced with new development and redevelopment in the City and surrounding areas. An overall increase in lighting levels throughout the Study

Area and vicinity can be expected with these new development and redevelopment projects. Similarly, glass and glazing in new structures would potentially create additional sources of glare in the area. Compliance with applicable City and County lighting standards would prevent light spillover and adverse impacts on adjacent light-sensitive uses. Glare impacts would be directly related to the amount of glazing and mirror surfaces used on building facades. Setbacks, landscaping, and development standards relating to lighting are expected to prevent substantial light intrusion and spillover.

4.1.8 MITIGATION MEASURES

No mitigation measures are available to reduce impacts to aesthetics.

4.1.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Scenic Vistas

Significant and Unavoidable.

Scenic Highways

No Impact.

Visual Character and Quality

Significant and Unavoidable.

Light and Glare

Less Than Significant.

Cumulative Impacts

Significant and Unavoidable.

4.2 AGRICULTURE AND FOREST RESOURCES

This section analyzes impacts to agricultural resources based on a review of existing publications, regulations, and current aerial photographs of the City.

4.2.1 RELEVANT POLICIES AND REGULATIONS

State

Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) administers the Farmland Mapping and Monitoring Program (FMMP) pursuant to Section 65570 of the *California Government Code*. The FMMP identifies farmlands in the State based on (1) current land use information and (2) soil survey data on soil characteristics that best supports crop production as compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). The following farmland classifications are based on information from the Department of Conservation Division of Land Resources Protection's, *A Guide to the Farmland Mapping and Monitoring Program (2004 Edition)* (LRP 2004).

- ***Prime Farmland.*** Prime Farmland is land which has the best combination of physical and chemical characteristics for the long-term production of agricultural crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed (including water management) according to current farming methods. The land must have been used for the production of irrigated crops at some time during the two previous cycles prior to the mapping date.¹ It does not include publicly owned lands for which there is an adopted policy that prevents agricultural use.
- ***Farmland of Statewide Importance.*** Farmland of Statewide Importance is land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops at some time during the two previous cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy that prevents agricultural use.
- ***Unique Farmland.*** Unique Farmland is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. It must be currently used for the production of specific high-economic value crops (as listed in the last three years of *California Agriculture* produced by the California Department of Food and Agriculture). It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or a high yield of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two cycles prior to the mapping date.
- ***Farmland of Local Importance.*** Farmland of Local Importance is of importance to the local agricultural economy and is determined by each County's Board of Supervisors and a local advisory committee. According to the DOC, Farmland of Local Importance in

¹ A cycle is approximately two years.

Los Angeles County includes producing lands that would meet the standard criteria for Prime Farmland or Farmland of Statewide Importance, but which are not irrigated (LRP 2004).

These four categories make up the Important Farmland designation. Other designations include:

- **Grazing Land.** Grazing land is land on which the existing vegetation, whether grown naturally or through management, is suitable for livestock grazing. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-up Land.** Urban and built-up land is occupied with structures that have a building density of at least one unit to ½ acre or approximately six structures to a ten-acre parcel.²
- **Other Land.** This category is for land that is not included in any other mapping categories. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines; borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land that is surrounded on all sides by urban development and is greater than 40 acres is mapped as “Other Land”.
- **Water** includes perennial water bodies of at least 40 acres.

The program has designated approximately 25,326 acres of Important Farmland in the County of San Bernardino in 2008. Of that, 14,089 acres are designated as Prime Farmland, 6,747 acres are designated as Farmland of Statewide Importance, 2,661 acres are Unique Farmland, and 1,829 acres are designated as Farmland of Local Importance. In addition, there are 901,666 acres of Grazing Land in the County (LRP 2009a).

California Land Conservation Act

The California Land Conservation Act of 1965 (Williamson Act) enables local governments to enter into contracts with private landowners for preserving agricultural land or related open space uses. In return, landowners receive a lower property tax assessment based on farming and open space uses, as opposed to full market value. Local governments used to receive an annual partial replacement of property tax revenues lost as a result of a Williamson Act Contract from the State via the Open Space Subvention Act of 1971. However, State budget cuts have suspended these subvention payments (LRP 2007). In turn, the contract prevents the development of the land for urban uses for the next ten years. A filing for non-renewal is needed if the property is planned for development after ten years, or cancellation of the contract with payment of fees would be required.

As of 2007 (the most recent data), approximately 2,247 acres of Prime Farmland in San Bernardino County were under Williamson Act contracts and another 2,402 acres of non-Prime Farmland were also under Williamson Act contracts for a total of 4,649 acres under contracts (LRP 2008).

² A “unit” is defined as a structure or foundation on which uses associated with development are placed. Uses may include and are not limited to residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water-control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit if they are part of a surrounding urban area.

Local

Special Use Regulations for Residential Development Districts

Section 17.08.30 of City's Development Code (Title 17 of the Ranch Cucamonga Municipal Code) identifies allowable agriculture-related land uses in the City's residential zones. The regulations allow the following on lots of 2.5 acres or more:

1. Farms for orchards, trees, field crops, truck gardening, flowering gardening, and other similar enterprises carried on in the general field of agriculture.
2. Raising, grazing, breeding, boarding or training of large or small animals: except concentrated lot feeding and commercial poultry and rabbit raising enterprises.
3. Aviaries (limited to 50 birds per acre).
4. Apiaries, provided that all hives or boxes housing bees shall be placed at least 400 feet from any street, road, highway, public school, park, property boundary, or from any dwelling or place of human habitation other than that occupied by the owner or caretaker of the apiary. Additionally, a water source shall be provided on site.
5. Retail sale of products raised on property, excluding retail nursery and sale of animals for commercial purposes.

Conditional Use Permits are required for:

1. Wholesale distributor and processor of nursery-plant stock. Retail nursery where incidental and contiguous to propagation of nursery stock and/or wholesale distributor. Outdoor storage and display is prohibited except for nursery-plant stock.
2. Dog kennels, dog training schools, small animal shelters, and dog breeding establishments with outside runs.
3. The raising of chinchilla, nutria, hamsters, guinea pigs, cavy, and similar small animals.
4. Frog farms.
5. Worm farms.

Additionally, subsection E contains Special Use Regulations that permit or conditionally permit agricultural uses prior to the development of lots that are at least 2.5 acres or more.

4.2.2 EXISTING CONDITIONS

While the City of Rancho Cucamonga is largely developed, there are pockets of agricultural land in the form of vineyards and orchards that are remnants of its historic agricultural past. These consist of 3- to 30-acre parcels and are located at the following general locations:

- A vineyard located at the northeastern corner of Haven Avenue and 4th Street;
- A vineyard located north of Arrow Highway and east of the I-15 Freeway;
- A plant nursery under transmission lines south of Foothill Boulevard and west of Day Creek Channel;
- Orchards on both sides of Etiwanda Avenue, north of SR-210 Freeway;
- A vineyard south of Foothill Boulevard and west of Deer Creek;
- A vineyard southeast of the I-15 Freeway at Etiwanda Avenue;
- A vineyard south of Victoria Street and west of East Avenue;
- An orchard on the northwest corner of Banyan Street and Hellman Avenue; and

- An orchard at the corner of Church Street and Ramona Avenue.

Each of these agricultural areas is surrounded by urban development. In addition to these smaller isolated areas, larger vineyards are also located just outside the City and east of the I-15 and SR-210 freeway interchange.

These existing agricultural uses are designated “Farmland” under the FMMP, as shown in Exhibit 4.2-1, Farmland Resources. Most of the undeveloped vacant land at the base of the San Gabriel Mountain foothills, within the City’s SOI is designated as Grazing Land. Table 4.2-1 provides the acreage breakdown of Farmland in the study area.

**TABLE 4.2-1
EXISTING FARMLAND RESOURCES**

Farmland Designation	2010 General Plan Update Study Area (acres)	Percent	County of San Bernardino (acres)	Percent
Prime Farmland	16.17	0.08%	14,089	0.97%
Farmland of Statewide Importance	17.04	0.08%	6,747	0.47%
Unique Farmland	156.84	0.76%	2,661	0.18%
Farmland of Local Importance	18.71	0.09%	1,829	0.13%
Grazing Land	1,761.83	8.51%	901,666	62.20%
Other Designations (Urban land, Other Land and Water)	18,736.41	90.48%	522,555	36.05%
Total	20,707.00	100.00%	1,449,547	100.00%
Source: LRP 2009a; LRP 2009b.				

In addition to the 208.76 acres of Important Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland and Farmland of Local Importance) and 1,761.83 acres of Grazing Land within the City boundaries, another 5,676 acres (95.8% of the SOI) are designated as Grazing Land in the SOI.

There are no lands under Williamson Act contracts in the City.

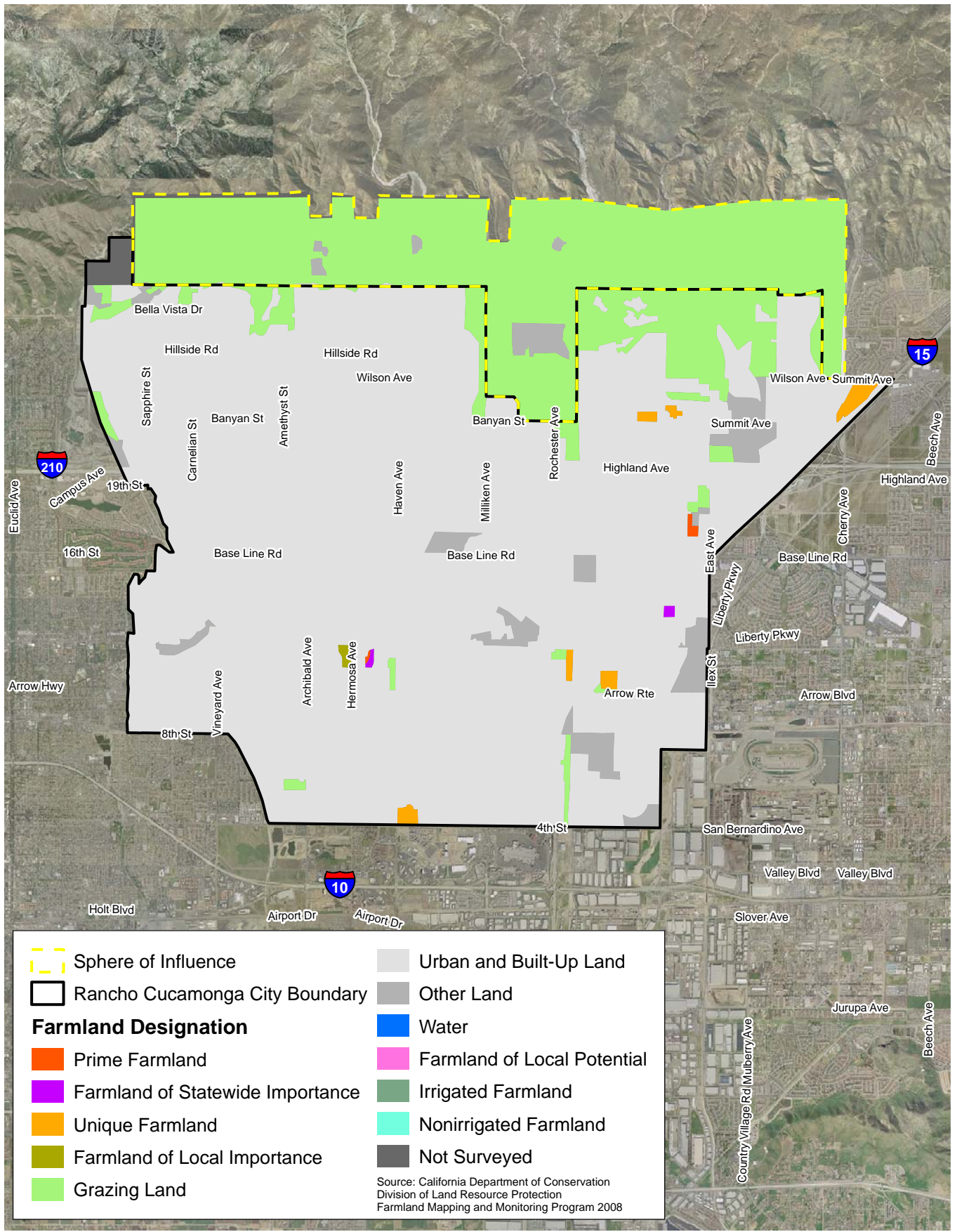
4.2.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on agricultural resources if it would:

Threshold 4.2a: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

Threshold 4.2b: Conflict with existing zoning for agricultural use, or a Williamson Act contract;

Threshold 4.2c: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]);



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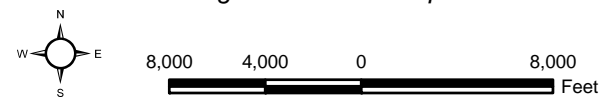
	Sphere of Influence		Urban and Built-Up Land
	Rancho Cucamonga City Boundary		Other Land
Farmland Designation			
	Prime Farmland		Water
	Farmland of Statewide Importance		Farmland of Local Potential
	Unique Farmland		Irrigated Farmland
	Farmland of Local Importance		Nonirrigated Farmland
	Grazing Land		Not Surveyed

Source: California Department of Conservation
Division of Land Resource Protection
Farmland Mapping and Monitoring Program 2008

Farmland Resources

Rancho Cucamonga General Plan Update

Exhibit 4.2-1



Threshold 4.2d Result in the loss of forest land or conversion of forest land to non-forest use; and/or

Threshold 4.2e: Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

4.2.4 GENERAL PLAN GOALS AND POLICIES

The proposed 2010 General Plan Update recognizes the presence of farmland in the City. Applicable goals and related policies are identified below in italics. Each policy is followed by an implementation action which identifies the programs and procedures that will be used to put 2010 General Plan Update goals and policies into action.

GOAL RC-1: Encourage stewardship of natural open space areas, environmentally sensitive lands, and agricultural resources.

Policy RC-1.4: Evaluate the conservation of economically viable agriculture on lands that are designated by the State as important farmland.

***Implementation Action:** Investigate issues and formulate a strategy that will best reflect the long-term interests of the community as a whole. Where it is determined that long-term agricultural use is in conflict with community goals, seek the removal of any designated farmlands from the State Department of Conservation mapping program.*

4.2.5 STANDARD CONDITIONS OF APPROVAL

There are no existing regulations relating to agricultural resources that would apply to future development or redevelopment in the City of Rancho Cucamonga.

4.2.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment under the 2010 General Plan Update would lead to changes in existing land uses and the conversion of agricultural lands in the City to urban uses.

Farmland Resources

Threshold 4.2a: Would the proposed General Plan Update convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Threshold 4.2e: Would the proposed General Plan Update involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

While the City of Rancho Cucamonga is largely developed, there remain pockets of agricultural land ranging from 3 to 30 acres in size in the form of vineyards and orchards that are remnants of the City's agricultural heritage. Of the total 208.76 acres of designated farmland in the study area, approximately 16.17 acres of these lands are designated as Prime Farmland, 156.84

acres as Unique Farmland, 17.04 acres as Farmland of Statewide Importance, and 18.71 acres as Farmland of Local Importance under the FMMP.

The proposed Land Use Plan does not include an agricultural designation. The Equestrian/Rural Overlay District in the proposed Land Use Plan would allow the keeping of horses and other farm animals in the northern section of the City, but is not intended to allow agricultural operations. Thus, no agricultural uses are proposed for preservation under the 2010 General Plan Update. Vineyards and orchards designated as Unique Farmland and Farmland of Statewide Importance are proposed for urban development under various land use designations, including Industrial Park, General Industrial, Very Low Density Residential, Low Medium Density Residential, and Mixed Use. Only the plant nursery, which occupies approximately 12.5 acres beneath the transmission lines and is designated as Flood Control/Utility Corridor, would allow the continued use of the nursery and would not convert its current Unique Farmland designation. Therefore, buildout of the 2010 General Plan Update Study Area would convert 196.26 acres of Important Farmland to non-agricultural uses.

Goal RC-1 of the proposed 2010 General Plan Update encourages stewardship of agricultural resources, and Policy RC-1.4 calls for evaluating the conservation of economically viable agriculture on lands that are designated as Important Farmland, since these areas are under increasing pressure from urbanization. However, the proposed Land Use Plan shows that these areas are planned for development with urban uses. To determine the appropriate balance between the competing priorities of urbanization and agricultural land protection, the City will investigate ways to preserve agricultural lands through the use of conservation easements and to formulate a strategy that will best reflect the long-term interests of the City. As the Resource Conservation Chapter states, "where it is determined that long term agricultural use is in conflict with community goals, the City will seek the removal of any designated farmlands from the State Department of Conservation mapping program". Additionally, the City of Rancho Cucamonga supports increasing access to healthy, locally grown foods through various grants and partnerships. Throughout the City, access to these resources is encouraged through community gardens, school gardens, farmers' markets, and edible estates.

The eventual development of these vineyards and orchards with urban land uses would lead to the conversion of farmland to other uses. Despite this long-term expectation, agricultural uses are allowed as an interim use by the City's Development Code; therefore, these vineyards and orchards are expected to remain until individual property owners decide to develop these lands.

Since the existing vineyards are small, scattered operations that do not support any larger-scale agricultural uses and since they represent less than one percent of the total Important Farmland in the County, their conversion to urban land uses is not expected to have a major impact on the County's crop value. However, future development associated with buildout of the proposed 2010 General Plan Update pursuant to the proposed Land Use Plan (refer to Exhibit 3-3 in Section 3.0, Project Description) would result in the conversion of these farmland areas to non-agricultural uses, thus creating a significant impact. There are no feasible mitigation measures to address this impact under the proposed land use plan; therefore, buildout of the proposed 2010 General Plan Update would result in a significant and unavoidable impact related to the conversion of farmland.

Grazing lands include scattered undeveloped lands in the City and the foothills of the San Gabriel Mountains. The loss of small, scattered undeveloped lands for grazing would not adversely affect Farmlands, nor would it result in a significant impact related to the conversion of farmlands to non-agricultural uses.

As discussed in Section 4.3, Biological Resources, the 2010 General Plan Update Study Area does not include any lands that qualify as forest land of timberland. Therefore, no impacts would occur related to the loss or conversion of forest land to a non-forest use.

Impact 4.2a and 4.2e: Future development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses. No mitigation is available under the proposed land use plan; therefore, this loss of farmland would result in a significant and unavoidable impact.

Agricultural Zoning

Threshold 4.2b: Would the proposed General Plan Update conflict with existing zoning for agricultural use, or a Williamson Act contract?

According to the proposed Land Use Plan (refer to Exhibit 3-3 of Section 3.0, Project Description), the lots that are currently vineyards and orchards would be converted into urban uses as part of future, anticipated development.

The City does not have an agricultural land use designation in its existing Land Use Plan or the proposed Land Use Plan. The City's Development Code also does not have an agricultural zone, although agricultural uses are allowed as an interim use on lots 2.5 acres or more in size within the Residential Development Districts. Thus, existing vineyards and orchards are expected to remain without conflict with the City's Development Code, and no impact would occur.

Additionally, there are no lands within the City that are under a Williamson Act contract; therefore, no impacts related to Williamson Act contracts would occur, and no mitigation is necessary.

Impact 4.2b: Future development under the proposed Land Use Plan would lead to the conversion of vineyards and orchards to urban uses, but this will not create any conflict with the existing zoning, which allows agricultural uses as an interim use. Also, no conflict with Williamson Act contracts would occur. No impacts would occur.

Forest Lands and Timberlands

Threshold 4.2c: Would the proposed General Plan Update conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?

Threshold 4.2d: Would the proposed General Plan Update result in the loss of forest land or conversion of forest land to non-forest use?

As discussed in Section 4.3, Biological Resources, the 2010 General Plan Update Study Area does not include any lands that qualify as forest land of timberland. Therefore, no impacts would occur related to the loss or conversion of forest land to a non-forest use. Further, there are no areas within the 2010 General Plan Update Study Area that are zoned as forest land, timberland, or Timberland Production. No impacts would occur; no mitigation is required.

Impact 4.2c The proposed 2010 General Plan Update Study Area does not contain and 4.2d: any forest land or timberland, nor is it zoned as such. No impact would occur.

4.2.7 CUMULATIVE IMPACTS

The cumulative impacts on agricultural resources are based on the evaluation of impacts throughout the County of San Bernardino.

San Bernardino County has approximately 25,326 acres of Important Farmland that produced over \$547.4 million of crop value in 2008. The majority of these agricultural lands are located in the southern sections of the cities of Ontario and Chino where dairies and field crops are grown; along the San Timoteo Canyon; south of Zanja Creek in Redlands as orchards; south of the Santa Ana River in San Bernardino as crop lands; along the Mojave River; and in the area east of Barstow. The major agricultural products in the County include milk, eggs, cattle and replacement heifers, trees/shrubs, alfalfa, bokchoi, oranges, indoor decorative, and ground cover (County of San Bernardino, Department of Agriculture/Weights and Measures 2008).

Future development in the City of Rancho Cucamonga and the rest of San Bernardino County is expected to lead to the cumulative decrease in Important Farmland acreage and crop production value over time, as has been experienced by the County since 1980. The crop value in 1980 was over \$1.0 billion but decreased to \$873.6 million in 1990 and is now only \$547.4 million. This trend is expected to continue as vacant land becomes more valuable for urban land uses and as the cost of agricultural production increases (due to decreases in water supply and increases in operating costs), thus making agricultural operations less financially feasible (County of San Bernardino, Department of Agriculture/Weights and Measures 2008).

The decreasing area of Important Farmland and agricultural crop production value is considered a significant adverse impact and the contribution to a cumulative impact due to the conversion of vineyards and orchards in the City of Rancho Cucamonga represents a significant and unavoidable, cumulative impact.

4.2.8 MITIGATION MEASURES

No mitigation measures are available to reduce the identified impacts to agricultural resources.

4.2.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Farmland Resources

Significant and Unavoidable.

Agricultural Zoning

No Impact.

Forest Land and Timberlands

No Impact.

Cumulative Impacts

Significant and Unavoidable.

4.3 AIR QUALITY

This section analyzes potential local and regional air quality impacts and is based on the *Air Quality Assessment for Rancho Cucamonga General Plan Update* (Air Quality Assessment) prepared by Mestre Greve Associates in January 2010 (amended in February 2010) and included in its entirety in Appendix B. Greenhouse gas (GHG) emissions and climate change are addressed in Section 4.5, Climate Change, of this EIR.

4.3.1 RELEVANT POLICIES AND REGULATIONS

The City of Rancho Cucamonga is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino counties and all of Orange County. Air quality in the SCAB is regulated by U.S. Environmental Protection Agency (USEPA), the CARB, and the South Coast Air Quality Management District (SCAQMD). Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although USEPA regulations may not be superseded, both State and local regulations may be more stringent. The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD and produces estimates of anticipated future growth and vehicular travel in the basin which are used for air quality planning. The Federal, State, regional, and local regulations for criteria air pollutants and toxic air contaminants (TACs) are discussed below.

Federal

The USEPA is the primary Federal agency for regulating air quality, and implements the provisions of the Federal Clean Air Act (FCAA). The FCAA establishes national ambient air quality standards (NAAQS), summarized in Table 4.3-1. The USEPA has established NAAQS for six major pollutants; ozone (O₃), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), as well as lead. These air pollutants are referred to as criteria air pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

The USEPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

State

The CARB sets and enforces emission standards for motor vehicles, fuels, and consumer products, establishes the health-based California Ambient Air Quality Standards (CAAQS), and monitors air quality levels throughout the State. The CARB also identifies and sets control measures for toxic air contaminants.

The CARB also performs air quality related research, provides compliance assistance for businesses, produces education and outreach programs and materials, and provides assistance for air quality districts, such as the SCAQMD. Under the California Clean Air Act (CCAA), the CARB has established CAAQS to protect the health and welfare of Californians, summarized below in Table 4.3-1. State standards have been established for the six criteria air pollutants as

well as four additional pollutants: visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

**TABLE 4.3-1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	NAAQS ²		CAAQS ^{1,3}
		Primary ^{3,4}	Secondary ^{3,5}	Concentration ^e
O ₃ ⁸	1 Hour	—	Same as Primary Standard	0.09 ppm (180 µg/m ³)
	8 Hour	0.075 ppm (147 µg/m ³)		0.070 ppm (137 µg/m ³) ⁱ
CO	1 Hour	35 ppm (40 mg/m ³)	—	20 ppm (23 mg/m ³)
	8 Hour	9 ppm (10 mg/m ³)		9.0 ppm (10 mg/m ³)
	8 Hour (Lake Tahoe)	—		6.0 ppm (7 mg/m ³)
NO ₂	AAM ⁶	0.053 ppm (100 µg/m ³)	Same as Primary Standard	0.030 ppm (56 µg/m ³) ^j
	1 Hour	0.100ppm ¹⁰	0.053 ppm (100 µg/m ³)	0.18 ppm (338 µg/m ³) ^j
SO ₂	AAM ⁶	0.03 ppm (80 µg/m ³)	—	—
	24 Hour	0.14 ppm (365 µg/m ³)	—	0.04 ppm (105 µg/m ³)
	3 Hour	—	0.5 ppm (1,300µg/m ³)	—
	1 Hour	—	—	0.25 ppm (655 µg/m ³)
PM ₁₀ ⁸	24 Hour	150 µg/m ³	Same as Primary Standard	50 µg/m ³
	AAM ⁶	—		20 µg/m ³ ⁹
PM _{2.5} ⁸	24 Hour	35 µg/m ³	Same as Primary Standard	—
	AAM ⁶	15 µg/m ³		12 µg/m ³
Pb ⁹	Rolling 3-Month Average	—	—	0.15 µg/m ³
	Quarterly Average	1.5 µg/m ³	Same as Primary Standard	—
Hydrogen Sulfide (H ₂ S)	1 Hour	No Federal Standards		0.03 ppm (42 µg/m ³)
Sulfates (SO ₄)	24 Hour			25 µg/m ³
Visibility Reducing Particles	8 Hour			Extinction coefficient of 0.23 per km; visibility ≥10 miles (≥30 miles for Lake Tahoe)
Vinyl Chloride ⁷	24 Hour			0.01 ppm (26 µg/m ³)

Pollutant	Averaging Time	NAAQS ²		CAAQS ^{1,3}
		Primary ^{3,4}	Secondary ^{3,5}	Concentration ⁶
ppm – parts per million; $\mu\text{g}/\text{m}^3$ – micrograms per cubic meter; mg/m^3 – milligrams per cubic meter; km – kilometers; — – not applicable/no standard; PST – Pacific Standard Time.				
¹ California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, PM_{10} , $\text{PM}_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.				
² National standards (other than ozone, PM_{10} , $\text{PM}_{2.5}$, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10} , the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For $\text{PM}_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current Federal policies.				
³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.				
⁴ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.				
⁵ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.				
⁶ Annual Arithmetic Mean				
⁷ The ARB has identified vinyl chloride as a 'toxic air contaminant' with no threshold level of exposure for adverse health effects determined. This action allows for the implementation of control measures at levels below the ambient concentrations specified for this pollutants.				
⁸ On September 21, 2006 EPA published a final rule revoking the annual $50 \mu\text{g}/\text{m}^3$ PM_{10} standard and lowering the 24-hour $\text{PM}_{2.5}$ standard from $65 \mu\text{g}/\text{m}^3$. On March 12, 2008 EPA lowered the 8-hour Ozone standard to 0.075 ppm from 0.08 ppm. Attainment designations are to be issued in December, 2009 by March 2010 with attainment plans due April, 2010 by March, 2013.				
⁹ Final rule signed October 15, 2008.				
¹⁰ 3 year average of 98th percentile of maximum daily 1-hour concentration, January 22, 2010.				
Source: Mestre Greve Associates 2010a				

Regional

The CCAA required all air pollution control districts in the State to prepare a plan prior to December 31, 1994 to reduce pollutant concentrations exceeding the CAAQS and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years. The SCAQMD satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and SCAG in coordination with local governments and the private sector. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting State and Federal ambient air quality standards. The AQMP is incorporated into the SIP by CARB to satisfy the FCAA requirements discussed above.

The 2003 AQMP is the current Federally-approved AQMP for ozone. The 2003 AQMP was adopted locally on August 1, 2003, by the governing board of the SCAQMD. CARB adopted the plan as part of the California SIP on October 23, 2003. The PM_{10} attainment plan from the 2003 AQMP received final approval from the USEPA on November 14, 2005 with an effective date of December 14, 2005. As of February 14, 2007 the USEPA had not acted on the ozone attainment plan of the 2003 AQMP. On this date, CARB announced that it was rescinding the ozone attainment plan from the 2003 AQMP with the intention to expedite approval of the 2007 AQMP. However, on March 10, 2009 the USEPA announced partial approval and partial disapproval of the ozone attainment plan of the 2003 AQMP effective April 9, 2009. The portions disapproved by the USEPA were determined to not be required by the FCAA because they represented revisions to previously approved AQMP elements. Even with the disapproved elements, the 2003 AQMP satisfied the requirements of the USEPA and did not trigger sanction clocks.

The 2007 AQMP was adopted by the SCAQMD on June 1, 2007. CARB adopted the plan as a part of the California SIP on September 27, 2007. The SIP was submitted to the USEPA on November 16, 2007, and the USEPA has not taken action on the 2007 AQMP at this time. The 2007 AQMP was prepared in response to the implementation of the Federal PM_{2.5} and 8-hour ozone NAAQS. The implementation of the new standards required completion of plan addressing attainment of the 8-hour ozone standard by June of 2007 and completion of a plan addressing the PM_{2.5} standard one year later, in April of 2008. The attainment date for the PM_{2.5} NAAQS is earlier (i.e., 2015) than the attainment date for the ozone NAAQS (i.e., 2021) and the SCAQMD felt that delaying a plan for PM_{2.5} by a year could jeopardize the SCAB's ability to attain the standard. Further, development of a plan for ozone would have likely focused on lowering VOC emissions, which would have no effect on PM_{2.5} levels. Reductions in NO_x emissions result in reductions in both ozone and PM_{2.5} levels.

The 2007 AQMP demonstrates attainment of the 65 µg/m³ 24-hour average and 15µg/m³ annual average PM_{2.5} standards by the 2015 deadline. However, it should be noted that in September of 2006, the USEPA lowered the 24-hour PM_{2.5} NAAQS to 35 µg/m³. An attainment plan for the revised standard will need to be completed by December 14, 2013. The deadline for meeting the revised standard will not change (i.e., April 2015) but five year extensions to attain the standard may be granted by the USEPA.

The 2007 AQMP determined that the SCAB would not be able to achieve the 0.08-ppm 8-hour ozone standard by the 2021 deadline without the use of "black box" measures. "Black box" measures anticipate the development of new technologies or improving existing control technologies that are not well defined at the time the plan is prepared. However, the use of "black box" measures is not allowed for areas with a Severe-17 non-attainment designation. Because of this the SCAQMD and CARB requested to the USEPA to "bump up" the basin's classification to Extreme with the submittal of the 2007 AQMP. The USEPA proposed approval of this request in August 2009 but as of January 2010, no final action has been taken (Cassmassi 2010). Approval would extend the required attainment date to 2024 and allow the use of "black box" measures. The "black box" reductions needed for ozone attainment are estimated to be 190 tons per day (tpd) of NO_x and 27 tpd of VOC. These reductions represent a 17 percent reduction in 2002 average daily NO_x emissions and a 3 percent reduction in 2002 average daily VOC emissions.

It should be noted that on March 12, 2008, the USEPA lowered the 8-hour ozone standard to 0.075 ppm. This effectively lowers the standard 0.009 ppm as 0.084 ppm is considered meeting the 0.08 ppm standard. A plan to attain the revised standard will need to be completed by 2013. Attainment deadlines for the revised standard have not been established and may vary depending on the severity of the exceedances.

Implementation of the 2007 AQMP is based on a series of control measures and strategies that vary by source type (i.e., stationary or mobile) as well as by the pollutant that is being targeted. Short-term and mid-term control measures are defined to achieve the PM_{2.5} standard by 2015. These measures are designed to also contribute to reductions in ozone levels. Additional, long-term measures are defined to attain the 8-hour ozone standard by 2024. The measures rely on actions to be taken by several agencies that have statutory authority to implement such measures. Each control measure will be brought for regulatory consideration in a specified time frame. Control measures deemed infeasible will be substituted by other measures to achieve the total emission reduction target for each agency.

The plan focuses on control of sulfur oxides (SO_x), directly emitted PM_{2.5}, and nitrogen oxides (NO_x) to achieve the PM_{2.5} standard. Achieving the 8-hour ozone standard builds upon the PM_{2.5} attainment strategy with additional NO_x and VOC reductions. The control measures in the 2007

AQMP are based on facility modernization, energy efficiency and conservation, good management practices, market incentives/compliance flexibility, area source programs, emission growth management and mobile source programs. In addition, CARB has developed a plan of control strategies for sources controlled by CARB (i.e. on-road and off-road motor vehicles and consumer products). Further, Transportation Control Measures (TCM) defined in SCAG's Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) are needed to attain the standards.

The 2007 AQMP includes 30 short-term and mid-term stationary and 7 mobile source control measures proposed for implementation by the district that are applicable to sources under their jurisdiction. Nine of these measures were included in the 2003 AQMP and have been updated or revised. Twenty-eight new measures are proposed based on replacement of the District's long-term reduction measures from the 2003 AQMP with more defined control measures or development of new control measures. Measures include; regulations to reduce VOC emissions from coatings, solvents, petroleum operations, and cutback asphalt; measures to reduce emissions from industrial combustion sources as well as residential and commercial space heaters; a measure to offset potential emission increases due to changes in natural gas specifications; localized control of PM emission hot spots; regulation of wood burning fireplaces and wood stoves; reductions from under-fired char broilers; reducing urban heat island through lighter colored roofing, and paving materials and tree planting programs; energy efficiency and conservation programs; and emission reduction from new or redevelopment projects through regulations that will establish mitigation options to be implemented in such project.

The TCMs defined in the RTP and RTIP fall into three categories, High Occupancy Vehicle measures, Transit and System Management Measures and Information-based Transportation Strategies. The High Occupancy Vehicle (HOV) Strategy attempts to reduce the proportion of commute trips made by single occupancy vehicles which constitute 72 percent of all home work trips according to the 200 U.S. Census. Specific measures include new HOV lanes on existing and new facilities, HOV to HOV bypasses and High Occupancy Toll (HOT) lanes. The Transit and Systems Management Strategy incentivize the use of transit, alternative transportation modes (e.g., pedestrian and bicycles), and increases in average vehicle occupancy by facilitating vanpools, smart shuttles and similar strategies. Systems management measures include grade separation and traffic signal synchronization projects. The information-based Transportation Strategy relies primarily on the innovative provision of information in a manner that successfully influences the ways in which individuals use the regional transportation system. Providing ride matching to increase ride-sharing and carpool trips and providing near real-time estimates of congestion in an effort to influence persons to defer traveling to a less congested period are examples of the strategy.

In addition to SCAQMD's measures and SCAG's TCMs, the Final 2007 AQMP includes additional short- and mid-term control measures aimed at reducing emissions from sources that are primarily under State and Federal jurisdiction including on-road and off-road mobile sources, and consumer products. Measures committed to be enacted by CARB include (1) improvements to the smog check program, (2) cleaner in-use heavy duty truck emission regulations, (3) increased regulations on goods movement sources including ships, harbor craft, and port trucks, (4) regulations for cleaner in-use off-road equipment including agricultural equipment, (5) various measures to reduce evaporative VOC emissions from fuel storage and dispensing, (6) tightened emission standards and product reformulation for consumer products that emit VOC's, and (7) reductions in emissions from pesticide applications.

Four long-term "black box" control approaches are presented in the 2007 AQMP. These measures include (1) further reductions from on-road sources by retiring or retrofitting older high-emitting vehicles and accelerated penetration of very low and zero emission vehicles,

(2) increased inspection and maintenance (I/M) programs for heavy-duty diesel trucks, (3) further reductions from off-road mobile sources through accelerated turn-over of existing equipment, retrofitting existing equipment and new engine emission standards, and (4) further reductions from consumer product VOC emissions.

The 2007 AQMP identifies four contingency measures that would need to be implemented if milestone emission targets are not met or if the standards are not attained by the required date. While implementation of these measures is expected to reduce emissions, there are issues that limit the viability of these measures as AQMP control measures. These issues include the availability of SCAQMD resources to implement and enforce the measure, cost-effectiveness of the measure, potential adverse environmental impacts, effectiveness of emission reductions, and availability of methods to quantify emission reductions.

4.3.2 EXISTING CONDITIONS

Climate

The climate in and around the City, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, excepting the summer months, which commonly bring substantially higher temperatures. In all portions of the basin, temperatures well above 100 degrees F. have been recorded in recent years. The annual average temperature in the basin is approximately 62 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground-based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin (SCAB) and is responsible for the high levels of ozone observed during summer months in the air basin.

Criteria Air Pollutants

Ozone (O₃)

Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between volatile organic compounds (VOC) (also referred to as reactive organic gasses (ROG) and nitrogen oxides (NO_x), which occur only in the presence of bright sunlight. Sunlight and hot weather cause ground-level ozone to form in the air. As a result, it is known as

a summertime air pollutant. Ground-level ozone is the primary constituent of smog. Because ozone is formed in the atmosphere, high concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when ozone levels are unhealthy. Numerous scientific studies have linked ground-level ozone exposure to a variety of problems, including:

- lung irritation that can cause inflammation much like a sunburn;
- wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities;
- permanent lung damage to those with repeated exposure to ozone pollution; and
- aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis.

Ground-level ozone can have detrimental effects on plants and ecosystems. These effects include:

- interfering with the ability of sensitive plants to produce and store food, making them more susceptible to certain diseases, insects, other pollutants, competition and harsh weather;
- damaging the leaves of trees and other plants, negatively impacting the appearance of urban vegetation, national parks, and recreation areas; and
- reducing crop yields and forest growth, potentially impacting species diversity in ecosystems.

Carbon Monoxide (CO)

Carbon monoxide is a colorless and odorless gas, which in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Carbon monoxide combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High carbon monoxide concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. Carbon monoxide concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow-moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of carbon monoxide are limited to locations within a relatively short distance (i.e., up to 600 feet or 185 meters) of heavily traveled roadways. Overall carbon monoxide emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

Nitrogen Dioxide (NO₂)

Nitrogen gas, normally relatively inert (unreactive), comprises about 80 percent of the air. At high temperatures (i.e., in the combustion process) and under certain other conditions it can combine with oxygen, forming several different gaseous compounds collectively called nitrogen oxides (NO_x). Nitric oxide (NO) and nitrogen dioxide (NO₂) are the two most important compounds. Nitric oxide is converted to nitrogen dioxide in the atmosphere. Nitrogen dioxide

(NO₂) is a red-brown pungent gas. Motor vehicle emissions are the main source of NO_x in urban areas.

Nitrogen dioxide is toxic to various animals as well as to humans. Its toxicity relates to its ability to form nitric acid with water in the eye, lung, mucus membrane and skin. In animals, long-term exposure to nitrogen oxides increases susceptibility to respiratory infections lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO₂ can suffer lung irritation and potentially, lung damage. Epidemiological studies have also shown associations between NO₂ concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

NO_x is a combination of primarily NO and NO₂. While the NAAQS only addresses NO₂, NO and the total group of nitrogen oxides is of concern. NO and NO₂ are both precursors in the formation of ozone and secondary particulate matter. Because of this and because NO emissions largely convert to NO₂, NO_x emissions are typically examined when assessing potential air quality impacts.

Sulfur Dioxide (SO₂)

Sulfur oxides (SO_x) constitute a class of compounds of which sulfur dioxide (SO₂) and sulfur trioxide (SO₃) are of greatest importance. Ninety-five percent of pollution related SO_x emissions are in the form of SO₂. SO_x emissions are typically examined when assessing potential air quality impacts of SO₂. Combustion of fossil fuels for generation of electric power is the primary contributor of SO_x emissions. Industrial processes, such as nonferrous metal smelting, also contribute to SO_x emissions. SO_x is also formed during combustion of motor fuels. However, most of the sulfur has been removed from fuels greatly reducing SO_x emissions from vehicles.

SO₂ combines easily with water vapor, forming aerosols of sulfurous acid (H₂SO₃), a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid (H₂SO₄). Peak levels of SO₂ in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO₂ gas and particles cause respiratory illness and aggravate existing heart disease. SO₂ reacts with other chemicals in the air to form tiny sulfate particles which are measured as PM_{2.5}.

Particulate Matter (PM₁₀ and PM_{2.5})

Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles smaller than 10 microns in size (PM₁₀) and smaller than or equal to 2.5 microns (PM_{2.5}). The size of the particulate matter is referenced to the aerodynamic diameter of the particulate. Smaller particulates are of greater concern because they can penetrate deeper into the lungs than large particles.

The principal health effect of airborne particulate matter is on the respiratory system. Short term exposures to high PM_{2.5} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long term exposures to high PM_{2.5} levels are associated with premature mortality and development of chronic respiratory disease. Short-term exposure to high PM₁₀ levels is associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms and possible premature mortality. The USEPA has concluded that available evidence does not suggest an association between long-term exposure to PM₁₀ at current ambient levels and health effects.

PM_{2.5} is directly emitted in combustion exhaust and formed from atmospheric reactions between of various gaseous pollutants including nitrogen oxides (NO_x) sulfur oxides (SO_x) and volatile organic compounds (VOC). PM₁₀ is generally emitted directly as a result of mechanical processes that crush or grind larger particles or the re suspension of dusts most typically through construction activities and vehicular travels. PM_{2.5} can remain suspended in the atmosphere for days and weeks and can be transported long distances. PM₁₀ generally settles out of the atmosphere rapidly and are not readily transported over large distances.

Lead (Pb)

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming or hematopoietic, the nervous, and the renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and decline in production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e. lead smelters) and are not applied to transportation projects.

Hydrogen Sulfide (H₂S)

Hydrogen sulfide (H₂S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. It can also be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H₂S at levels above the standard will result in exposure to a very disagreeable odor. In 1984, an ARB committee concluded that the ambient standard for H₂S is adequate to protect public health and to significantly reduce odor annoyance.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and / or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO₂) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Visibility Reducing Particulates

Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The State standard is intended to limit the frequency and severity of visibility impairment due to regional

haze. A separate standard for visibility-reducing particles that is applicable only in the Lake Tahoe Air Basin is based on reduction in scenic quality.

Vinyl Chloride (Chloroethene)

Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans.

South Coast Air Basin Attainment Designations

Based on monitored air pollutant concentrations, the USEPA and CARB designate areas relative to their status in attaining the NAAQS and CAAQS, respectively. Table 4.3-2 summarizes the current attainment designations for the SCAB. For the Federal standards, the required attainment date is also shown. The Unclassified designation indicates that the air quality data for the area does not support a designation of attainment or nonattainment.

**TABLE 4.3-2
SCAB ATTAINMENT DESIGNATIONS**

Pollutant	Federal	State
Ozone (O ₃)	Severe-17 Nonattainment (2021) ¹	Nonattainment
Respirable Particulate Matter (PM ₁₀)	Serious Nonattainment (2006)	Nonattainment
Fine Particulate Matter (PM _{2.5})	Nonattainment (2015)	Nonattainment
Carbon Monoxide (CO)	Attainment/Maintenance (2000)	Attainment
Nitrogen Dioxide (NO ₂)	Attainment/Maintenance (1995)	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Attainment	Attainment
Visibility Reducing Particles	n/a	Unclassified
Sulfates	n/a	Unclassified
Hydrogen Sulfide	n/a	Attainment
Vinyl Chloride	n/a	Attainment
n/a – not applicable ¹ Redesignation to Extreme Nonattainment with corresponding attainment date of 2024 is anticipated pending final action by the USEPA (Cassmassi 2010). Source: Mestre Greve Associates 2010a.		

As shown in Table 4.3-2, SCAB is currently designated at the Federal level as Severe-17 non-attainment for ozone, serious non-attainment for PM₁₀, non-attainment for PM_{2.5}, and attainment/maintenance for CO and NO₂. The SCAB has been designated by the State as non-attainment for ozone, PM₁₀, and PM_{2.5}. For the Federal designations, the qualifiers Severe-17 and Serious affect the required attainment dates as the Federal regulations have different requirements for areas that exceed the standards by greater amounts at the time of attainment/non-attainment designation. The SCAB is designated as in attainment of the Federal

SO₂ and lead NAAQS as well as the State CO, NO₂, SO₂, lead, hydrogen sulfide, and vinyl chloride CAAQS.

Existing Air Quality in Rancho Cucamonga

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin, in this case SCAB. Estimates for the SCAB have been made for existing emissions. The data indicate that on-road (e.g.; automobiles, busses and trucks) and off-road (e.g.; trains, ships, and construction equipment) mobile sources are the major source of current emissions in the SCAB.

Mobile sources account for approximately 64 percent of VOC emissions, 92 percent of NO_x emissions, 39 percent of direct PM_{2.5} emissions, 59 percent of SO_x emissions and 98 percent of CO emissions.

Area sources (e.g., architectural coatings, residential water heaters, and consumer products) account for approximately 30 percent of VOC emissions and 32 percent of direct PM_{2.5} emissions. Point sources (e.g., chemical manufacturing, petroleum production, and electric utilities) account for approximately 38 percent of SO_x emissions. Entrained road dust accounts for approximately 20 percent of direct PM_{2.5} emissions as an area source.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The City is in the area represented by measurements made at the Upland monitoring station. The Upland station is located approximately 4 miles west of the City. The pollutants measured at the Upland Station include ozone, carbon monoxide, PM_{2.5}, and nitrogen dioxide. PM₁₀ and sulfur dioxide are not monitored at the Upland station. The next nearest monitoring site to the City is the Fontana-Arrow Highway monitoring site located in the approximately 11 miles to the east. The monitored air quality data from 2006 to 2008, and a comparison to the NAAQS and CAAQS, from the Upland and Fontana-Arrow Highway Monitoring Stations is presented in Table 4.3-3.

The monitoring data presented in Table 4.3-3 illustrate that ozone and particulate matter (PM₁₀ and PM_{2.5}) are the air pollutants of primary concern in the project area.

The State 1-hour ozone standard was exceeded 51 days in 2008, 32 days in 2007, and 52 days in 2008 at the Upland Station. The Federal 1-hour ozone standard was exceeded 9 days in 2008, 7 days in 2007, and 14 days in 2008. The State 8-hour ozone standard was exceeded between 55 and 65 days each year over the past three years. The Federal 8-hour ozone standard was exceeded between 35 and 50 days in each of the past three years. There does not appear to be a distinct trend in either maximum ozone concentrations or days of exceedances in the area.

**TABLE 4.3-3
UPLAND AND FONTANA-ARROW HIGHWAY MONITORING STATIONS AIR
QUALITY DATA (2006–2008)**

Pollutant	State Standard	National Standard	Year	% Msrd. ¹	Max. Level	Days State Standard Exceeded ²	Days National Standard Exceeded ²
Ozone (1 Hour Average)	0.09 ppm	0.12 ppm ⁴	2008	94	0.155	51	9
			2007	96	0.145	32	7
			2006	99	0.166	52	14
Ozone (8 Hour Average)	0.070 ppm	0.08 ppm	2008	94	0.122	65	50
			2007	96	0.115	55	35
			2006	99	0.131	64	50
PM ₁₀ (24 Hour Average)	50 µg/m ³	150 µg/m ³	2008	99	75.0	73	0
			2007	98	276	209	13.2
			2006	99	142	176	0
PM ₁₀ ⁵ (AAM ³)	20 µg/m ³	None	2008	99	40.2	Yes	n/a
			2007	98	60.7	Yes	n/a
			2006	99	53.7	Yes	n/a
PM _{2.5} ⁵ (24 Hour Average)	None	65 µg/m ³	2008	66	49.0	n/a	-
			2007	90	77.5	n/a	-
			2006	88	52.6	n/a	27
PM _{2.5} (AAM ³)	12 µg/m ³	15 µg/m ³	2008	66	15.4	Yes	Yes
			2007	90	18.8	Yes	Yes
			2006	88	17.5	Yes	Yes
CO 1 Hour (Average)	20 ppm	35 ppm	2008	97	--	0	0
			2007	97	--	0	0
			2006	98	--	0	0
CO (8 Hour Average)	9.0 ppm	9 ppm	2008	97	1.59	0	0
			2007	97	1.65	0	0
			2006	98	1.90	0	0
NO ₂ (1 Hour Average)	0.18 ppm	0.100 ppm ⁶	2008	95	0.094	0	-
			2007	78	0.095	0	-
			2006	90	0.100	0	-
NO ₂ (AAM ³)	0.030 ppm	0.053 ppm	2008	95	0.023	No	0
			2007	78	0.027	No	0
			2006	90	0.031	Yes	0
SO ₂ (24 Hour Average)	0.04 ppm	0.14 ppm	2008	96	0.003	No	No
			2007	95	0.004	No	No
			2006	98	0.003	No	No
SO ₂ (AAM ³)	None	0.030 ppm	2008	96	0.001	n/a	No
			2007	95	0.001	n/a	No
			2006	98	0.001	n/a	No

-- Data Not Reported; n/a – no applicable standard, ppm – parts per million; µg/m³ – micrograms per cubic meter;

¹ Percent of year where high pollutant levels were expected that measurements were made.

² For annual averaging times a yes or no response is given if the annual average concentration exceeded the applicable standard. For the PM₁₀24 hour standard, daily monitoring is not performed. The number shown in Days State or National Standard Exceeded column is the actual number of days measured that State or National standard was exceeded.

³ Annual Arithmetic Mean

⁴ With the implementation of the Federal 8-hour ozone standard, the 1-hour standard was revoked as of June 15, 2005. The previous standard is provided for informational purposes.

⁵ On September 21, 2006 U.S. EPA announced that it was revoking the annual average PM₁₀ standard and lowering the 24-hour PM_{2.5} standard to 35 µg/m³. The previous standards are presented as the new standards are not fully implemented at this time.

⁶3 year average of 98th percentile of maximum daily 1-hour concentration, January 22, 2010.

Source: Mestre Greve Associates 2010a.

The State 24-hour standard for PM₁₀ was exceeded 73 days in 2006, 209 days in 2007, and 176 days in 2008 at the Fontana-Arrow Highway Station. The Federal 24-hour PM₁₀ standard was exceeded 13 days in 2007, but has not been exceeded in 2006 and 2008. The State annual average standard has been exceeded each of the past three years. There does not appear to be a noticeable trend in either maximum particulate concentrations or days of exceedances in the area. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

The Federal 24 hour standard for PM_{2.5} was exceeded 27 days in 2007 at the Fontana-Arrow Highway Station. Complete PM_{2.5} data for 2007 and 2008 were not accorded at the Fontana Station. Note that on September 21, 2006, USEPA revised the standard to 35 µg/m³. However, since designations for the revised standards will not be made until April 2010 only the number of days exceeding the original standard of 65 µg/m³ are reported. The annual average PM_{2.5} concentration has exceeded both the State and Federal standards for the past three years at the Fontana-Arrow Highway Station. There does not appear to be a noticeable trend in either maximum particulate concentrations or days of exceedances in the area.

The annual average NO₂ concentration has exceeded the State standard in 2006, but not in 2007 and 2008.

The monitored data shown in Table 4.3-3 show that other than ozone, NO₂, PM₁₀ and PM_{2.5} exceedances as mentioned above, no State or Federal standards were exceeded for the remaining criteria pollutants.

4.3.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist Form included as Appendix G of the CEQA Guidelines. The proposed project was determined to have a potentially significant impact for the following thresholds of significance and further analysis in this Draft EIR was determined to be necessary.

Threshold 4.3a: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Threshold 4.3b: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold 4.3c: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable NAAQS or CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Threshold 4.3d: Would the project expose sensitive receptors to pollutant concentrations?

Threshold 4.3e: Would the project create objectionable odors affecting a substantial number of people?

SCAQMD Thresholds

The SCAQMD has established significance thresholds to assess the impact of project related air pollutant emissions. Table 4.3-4 presents the most recent SCAQMD significance thresholds, adopted March 2009.

**TABLE 4.3-4
SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds		
Pollutant	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants		
TACs ^a	Maximum Incremental Cancer Risk \geq 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas \geq 1 in 1 million) Hazard Index \geq 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to Rule 402 ^b	
Ambient Air Quality For Criteria Pollutants^c		
NO ₂	1-hour average \geq 0.18 ppm Annual average \geq 0.03 ppm	
PM10	24-hour average \geq 10.4 $\mu\text{g}/\text{m}^3$ (construction) 24-hour average \geq 2.5 $\mu\text{g}/\text{m}^3$ (operation) Annual average \geq 1.0 $\mu\text{g}/\text{m}^3$	
PM2.5	24-hour average \geq 10.4 $\mu\text{g}/\text{m}^3$ (construction) 24-hour average \geq 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
Sulfate	24-hour average \geq 1.0 $\mu\text{g}/\text{m}^3$	
CO	1-hour average \geq 20.0 ppm (State) 8-hour average \geq 9.0 ppm (State/Federal)	
lbs/day: pounds per day; ppm: parts per million; $\mu\text{g}/\text{m}^3$: micrograms per cubic meter; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; TAC: toxic air contaminant ^a Toxic air contaminants (carcinogenic and non-carcinogenic). ^b Rule 402 states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals". ^c Ambient air quality threshold based on SCAQMD Rule 403. Source: SCAQMD 2009.		

4.3.4 GENERAL PLAN GOALS AND POLICIES

The proposed 2010 General Plan Update contains multiple goals and policies that relate to reduction of greenhouse gases. Implementation of these goals and policies and their corresponding implementation actions would reduce climate change impacts to existing and future developments.

Goal CM-1: Provide an integrated and balanced multi-modal transportation network of complete streets to meet the needs of all users and transportation modes.

Policy CM-1.1: Provide a safe and efficient street system in the City to support mobility goals, all transportation modes, and the goals of the Managing the Land Use, Community Design, and Historic Resources Chapter.

Implementation Action: Add the intersection improvements listed below to the Capital Improvement Program (CIP) or appropriate equivalents identified and approved by the City Engineer in the future that would offset the identified impacts; implement the improvements as funding becomes available. Prepare a report on the need for the improvements and their relationship to the impacts caused by new development in Rancho Cucamonga.

- Work with Caltrans and SANBAG to implement a new freeway interchange at I-15 and Arrow Highway.
- Complete Wilson Avenue between Milliken Avenue and Day Creek Boulevard.
- Complete Rochester Avenue between Banyan Street and Wilson Avenue.
- Pursue Federal funds for a grade separation of the SPRR at Etiwanda Avenue.
- Complete storm drain and widening of Hellman Avenue from Foothill Boulevard to Cucamonga Creek.
- Complete Wilson Avenue from East Avenue to Wardman Bullock
- Improve the Base Line Road at I-15 Freeway Interchange
- Complete Youngs Canyon from Cherry Avenue to Banyan Street

Policy CM-1.2: Provide an integrated network of roadways that provides for convenient automobile, transit, bicycle, and pedestrian circulation movement around the City.

Implementation Action: Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Chapter components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.

Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan.

Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Goal CM-2: *Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.*

Policy CM-2.1: Facilitate bicycling and walking citywide.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Chapter components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.*

Policy CM-2.2: Encourage all feasible measures to reduce total vehicle miles traveled by automobiles, including enhanced transit access and land use approaches that provide compact and focused development along major transit corridors.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.*

Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.

Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project.

Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Chapter components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.

Policy CM-2.3: Support the use of hybrid, electric, and low/zero emission vehicles.

Implementation Action: *Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.*

Policy CM-2.4: Replace City vehicles with energy-efficient and alternative fuel source models when replacing vehicles or adding to the City's fleet.

Implementation Action: *Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.*

Policy CM-2.5: Establish priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles.

Implementation Action: Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.6: Accommodate charging and fueling station for alternative fuel vehicles, and put forth strong efforts to have charging facilities provided at employment centers.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.7: Require new developments of more than 100 employees (per building or per tenant/company) to develop Transportation Demand Management programs to minimize automobile trips and to encourage use of transit, ridesharing, bicycling, and walking.

Implementation Action: Consider expanding §17.10.070 Trip Reduction of the Development Code to include additional Transportation Demand Management programs.

Policy CM-2.8: Support the installation of high-speed communications infrastructure to facilitate the ability of residents to work at home.

Implementation Action: Continue to implement Title 7 Telecommunications Regulations of the Municipal Code.

Goal CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.

Policy CM-3.1: Consult with regional transit operators to maintain and improve the coverage and frequency of transit service in the City.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension

from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.

Policy CM-3.2: Support Omnitrans' expansion of Bus Rapid Transit (BRT) into Rancho Cucamonga, along Foothill Boulevard, with stops at all major north-south streets and with direct routing via Victoria Gardens.

Implementation Action: Proactively engage with Omnitrans to identify the timing of BRT service, preferred BRT stops within the City, and necessary local infrastructure improvements needed to accommodate BRT service. Develop a time frame and development requirements so that development projects at affected locations can incorporate needed improvements along planned BRT routes. Work with Omnitrans to develop station designs, lighting, and station amenities that are compatible with Rancho Cucamonga's design character.

Policy CM-3.3: Provide local transit circulator service in the City to serve local neighborhoods, Victoria Gardens, the Metrolink Station, Civic Center, Central Park, and key destinations.

Implementation Action: Study the feasibility of establishing a local transit circulator to connect businesses, adjacent development, and activity centers in the City. Explore options for alternative funding from sources other than the General Fund, such as having merchants sponsor the shuttle. These buses should operate on fixed routes (with possibly some minimal real-time deviation) and on regular and convenient schedules. The service could be based on smaller (20-35 seat) buses. This action to include the following:

Conduct a Transit Planning Study

Study to determine the best approach to initiating local transit service, to develop a Short-Range (Five Year) Transit Plan for operating such a service, and to determine funding sources.

Explore the Feasibility of Extending Local Transit Service

Explore the possibility of extending to adjacent jurisdictions in cooperation with such jurisdictions who could also participate in funding, if beneficial to the City.

Work with Regional Transit Operators (Omnitrans)

Develop the optimum coordination and integration of bus transit services between the local City circulator system and the regional service.

Policy CM-3.4: Consult with Omnitrans to establish and maintain transit hubs at Victoria Gardens, Chaffey College, the Metrolink Station, and other locations as appropriate to facilitate use of transit and transfers between transit services.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus

routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.

Policy CM-3.5: Consider and evaluate the relocation of Metrolink Station to Haven Avenue to provide improved connections to transit and to support planned transit-oriented land uses along Haven Avenue.

Implementation Action: Work with Metrolink and SCRRA to study the feasibility of moving the Metrolink Station from its current location to Haven Avenue. Explore options for alternative funding from sources other than the General Fund, such as grants, and specifically grants that promote transit-oriented development.

Policy CM-3.6: In addition to requiring private development to provide transit amenities, consult with regional transit operators to provide attractive and convenient bus stops, including shade/weather protection, seats, transit information, and bus shelters as appropriate.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel. Also, develop a program, with identified funding sources, for providing amenities at bus stops in the City.

Policy CM-3.7: Continue to develop and maintain a citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets to provide connections between neighborhoods, schools, parks, civic center/facilities, recreational facilities, and major commercial centers.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and

amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.8: Continue to encourage the provision of bicycle facilities, such as bicycle lockers and secure bike parking, throughout the City.

Implementation Action: Identify existing locations where bicycle lockers and secure bicycle parking could be provided at key locations throughout the City, and develop a funding and implementation plan. Encourage/require the provision of bicycle lockers and secure bike parking for major development projects, as defined in the Development Code. Modify the Development Code to require provision of bicycle parking spaces, bicycle lockers, and, as appropriate, showers for bicycle riders at new buildings providing significant employment, at transit stations, in the commercial districts, and at recreational destinations in the City.

Policy CM-3.9: Identify and implement a dedicated funding source for implementation and completion of the bicycle network as identified in the Bicycle Plan.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.10: Continue to complete the installation of sidewalks and require new development to provide sidewalks.

Implementation Action: Use the CIP to identify a schedule for installing new and replacement sidewalks throughout the City, placing priority on installing missing sidewalks near schools and activity centers, and replacing sidewalks that have been identified as hazardous to public safety.

Policy CM-3.11: Continue to require pedestrian amenities on sidewalks on major streets that are key pedestrian routes, including the provision of benches, shade trees, and trash cans.

Implementation Action: *Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.*

Policy CM-3.12: Require that the siting and architectural design of new development promote safety, pedestrian-friendly design, and access to transit facilities.

Implementation Action: *Develop standards to be applied to development projects along transit corridors that require transit and pedestrian accessibility.*

Policy CM-3.13: Establish a number of bike hubs in the City (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes), at key transit nodes and at commercial nodes.

Implementation Action: *Conduct a study to determine the best locations for bike hubs in the City, and develop a plan, wayfinding program, and implementation process for providing bike hubs that provide secure bicycle lockers, bike racks, and connections to transit at key locations in the City.*

Policy CM-3.14: Enhance pedestrian and bicycle access to local and regional transit, including facilitating connections to transit.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.15: Coordinate the provision of the non-motorized networks (bicycle and pedestrian) with adjacent jurisdictions to maximize sub-regional connectivity.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and*

amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Goal CM-4: Maximize the operational efficiency of the street system.

Policy CM-4.1: Continue to implement traffic management and traffic signal operations measure along the arterial roadway to minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.2: Continue to design and operate arterials and intersections for the safe operation of all modes of transportation, including transit, bicyclists, and pedestrians.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.3: Continue to implement Intelligent Transportation System (ITS) measures and advanced traffic management technologies where appropriate.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Goal CM-5: *Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.*

Policy CM-5.1: Continue to require that new development participates in the cost of transportation mitigation and improvements necessitated by new development, including non-automobile solutions.

Implementation Action: *Require payment of Traffic Impact Fees as approved by the City Council, used to finance specific improvements made necessary by new development. The relationship between the fees, the cost of the improvements, and new development has been established in fee analyses approved by the City Council. These fees shall be reviewed from time to time and adjusted as needed.*

Policy CM-5.2: Require evaluation of potential traffic and transportation impacts associated with new development prior to project approval, and require adequate mitigation measures, including non-automobile solutions prior to, or concurrent with, project development.

Implementation Action: *Require applicants to prepare traffic and transportation impact assessments consistent with adopted City guidelines and standards. Continue to require sidewalks, pedestrian paths, and connections to be provided as part of new development projects to improve and enhance access between neighborhoods, and from neighborhoods to schools, parks, trails, commercial centers, and other activity centers.*

Goal CM-6: *Coordinate with other jurisdictions on regional transportation issues.*

Policy CM-6.2: Support appropriate regional plans for high-occupancy vehicle lanes, Bus Rapid Transit and express bus, rail transit, and high-speed rail, provided it does not negatively impact the City.

Implementation Action: *Consult with Omnitrans and/or Caltrans when coordinating with regional transportation plans that directly impact the City.*

Goal LU-2: *Facilitate sustainable and attractive infill development that complements surrounding neighborhoods and is accessible to pedestrians, bicycles, transit, and automobiles.*

Policy LU-2.1: Plan for vibrant, pedestrian-friendly mixed use and high-density residential areas at strategic infill locations along transit routes.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.*

Policy LU-2.2: Require new infill development to be designed for pedestrians and automobiles equally, and to provide connections to transit and bicycle facilities.

Implementation Action: *Continue development review of applications for infill development between the various City departments and regional-serving agencies to coordinate and maximize non-vehicular connections within the proposed developments and connecting to other areas of the City.*

Policy LU-2.3: Provide direct pedestrian connections between development projects where possible.

Implementation Action: *Establish procedures that allow City staff, during their review of infill development applications, to require pedestrian access studies to ensure that each development has maximized convenient and safe pedestrian connections to existing surrounding developments and public rights-of-way.*

Goal LU-3: Encourage sustainable development patterns that link transportation improvements and planned growth, create a healthy balance of jobs and housing, and protect the natural environment.

Policy LU-3.6: Create focused, pedestrian-friendly neighborhoods that are reminiscent of the qualities found in earlier days, particularly within the original communities of Cucamonga, Alta Loma, and Etiwanda, and along Historic Route 66 (Foothill Boulevard).

Implementation Action: *Continue to identify, prioritize, and install streetscape and landscape amenities that provide pleasant and comfortable streets, enhance City identity, and promote walking.*

Policy LU-3.8: Implement land use patterns and policies that incorporate smart growth practices, including placement of higher densities near transit centers and along transit corridors, allowing mixed-use development, and encouraging and accommodating pedestrian movement.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.*

Goal LU-4: Establish a pedestrian-friendly Foothill Boulevard corridor that facilitates transit use and provides a range of commercial destinations to serve both local and regional needs.

Policy LU-4.1: Provide new mixed-used development opportunities along the Foothill Boulevard Corridor to allow residential, commercial, and civic uses, and to accommodate both transit and automobiles.

Implementation Action: *Review and modify the Foothill Boulevard Specific Plan to ensure that allowable land uses not only provide for, but encourage, a mix of residential, commercial, and civic uses that target all modes of transportation.*

Goal LU-5: Support a regionally serving office district that provides professional and technical employment opportunities for the Inland Empire.

Policy LU-5.4: Promote a pedestrian-friendly corridor where employees can walk to restaurants, commercial services, and other amenities in the area.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.5: Require development to provide courtyards and plazas, public art, and landscaped open spaces that promote safe and convenient pedestrian movement with continuous landscaped pathways between buildings and along Haven Avenue.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.6: Support the integration of transportation facilities, including transit, to support the office environment.

Implementation Action: *Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project.*

Goal LU-12: *Foster a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga.*

Policy LU-12.2: Require the design of transit stops to be compatible with adjacent development and provide for adequate seating, signage, shade, and refuse receptacles.

Implementation Action: *Not identified*

Policy LU-12.3: Support development projects that are designed to facilitate convenient access for pedestrians, bicycles, transit, and automobiles.

Implementation Action: *Adopt a sustainable development program that incorporates green building standards.*

Policy LU-12.4: Retrofit, where feasible, existing neighborhoods to allow for convenient, multi-modal access to schools, parks, and shopping centers.

Implementation Action: *Inventory and establish priorities for retrofitting developments, neighborhoods, and districts lacking multi-modal access.*

GOAL CS-6: *Provide a safe, comprehensive network of interconnecting off-road trails with amenities that connect neighborhoods, parks, schools, open space, employment areas, retail services, other activity areas, and areas outside the City.*

Policy CS-6.1: Provide a comprehensive, interconnected off-road trail system that provides alternative mobility choices throughout the entire City and increases connectivity.

Implementation Action: *Continue to implement the principles of the Trails Implementation Plan.*

Energy Efficiency and Conservation

Goal RC-4: *Encourage the use of energy resources that are efficiently expended and obtained from diverse and sustainable sources, in an effort to minimize greenhouse gas and other air emissions.*

Policy RC-4.1: Pursue efforts to reduce energy consumption through appropriate energy conservation and efficiency measures throughout all segments of the community.

Implementation Action: As it becomes economically practical, identify sources and replace imported, non-renewable energy resources with domestic renewable energy sources such as solar and wind energy, recycled municipal solid waste, and green waste.

Policy RC-4.2: Promote the use of renewable energy and alternative energy technology, and support efforts to develop small-scale, distributed energy generation (e.g. solar, wind, cogeneration, and biomass) to reduce the amount of electricity drawn from the regional power grid and reduce the use of natural gas, while providing Rancho Cucamonga with a greater degree of energy and economic self-sufficiency.

Implementation Action: Provided that there would not be a decline in services to City residents or undue tax burden, use of energy efficiency and renewable energy resources will be employed for approving capital and operational expenditures.

Policy RC-4.3: Encourage the use of solar energy systems in homes and commercial businesses.

Implementation Action: Establish design criteria for active and passive solar applications within development proposals.

Policy RC-4.4: Reduce operational energy requirements through sustainable and complementary land use and circulation planning. Support implementation of State mandates regarding energy consumption and greenhouse gas reduction, including AB32 and SB375.

Implementation Action: Promote land use and circulation patterns that result in multi-purpose automobile trips and that facilitate the use of local and regional transit; continue to advance land use patterns that provide employment and housing opportunities for City residents in a manner that allows for practical options for mobility other than by automobile.

Policy RC-4.5: Support the development of private sources of sustainable and environmentally-friendly energy supplies, provided these are consistent with City aesthetic and public safety goals.

Implementation Action: Continue to make the recruitment and retention of “green” industries a priority in conjunction with economic development strategies.

Goal RC-5: Encourage the use of energy conservation strategies in City projects and operations to maximize energy efficiency and serve as a role model to the community and the region.

Policy RC-5.1: Serve as a role model by adopting recognizable standards and incorporating the use of sustainable strategies for new and existing public buildings that maximize occupant health and productivity, minimize operating costs, and provide good environmental stewardship.

Implementation Action: Collaborate and educate City departments on sustainable strategies that can be employed in new and existing public buildings.

Policy RC-5.2: Investigate the feasibility of using solar (photovoltaic) lights for City operated parking lots instead of conventional street and pedestrian lights that are powered by electricity in an effort to conserve energy.

Implementation Action: Establish a retrofit program as photovoltaic street lighting becomes more cost-effective than other technologies.

Policy RC-5.3: Explore and consider the costs and benefits of alternative fuel vehicles including hybrid, electric, natural gas, and hydrogen powered vehicles when purchasing new City vehicles.

Implementation Action: Continue to meet the objective of reducing fuel consumption when negotiating for new or replacements to the City's fleet vehicles.

Goal RC-6: Encourage and support green buildings in Rancho Cucamonga.

Policy RC-6.1: Add energy efficiency standards in the Rancho Cucamonga Municipal Code based on green building principles, to reduce energy requirements (particularly for heating, cooling, and lighting) in new construction.

Implementation Action: Adopt a formal green building program or create one based on a national model, such as LEED, GreenPoint Rated, and/or other programs into the City's codes.

Policy RC-6.2: Encourage green practices for new and existing buildings throughout the community.

Implementation Action: Provide developer incentives for constructing green buildings.

Policy RC-6.3: Promote energy-efficient design features, including but not limited to, appropriate site orientation, use of light-colored roofing and building materials, and use of evergreen trees and wind-break trees to reduce fuel consumption for heating and cooling beyond the minimum requirements of Title 24 State Energy Codes.

Implementation Action: Review and update the City's design guidelines to address energy-efficient design features.

Policy RC-6.4: Promote green practices and the use of energy saving designs and devices for new and existing buildings throughout the community. Consult with energy providers such as Southern California Edison, Southern California Gas, the Rancho Cucamonga Municipal Utility, and others to establish and coordinate energy efficiency programs that promote energy efficient design in all projects and assist residential, commercial, and industrial users.

Implementation Action: During the development review process for larger development projects (greater than 10 units/or 10,000 square feet), coordinate with energy providers to determine if additional energy efficiency measures can be incorporated into a project design.

4.3.5 STANDARD CONDITIONS OF APPROVAL

Standard Conditions

SC 4.3-1 All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM2.5 and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.

4.3.6 ENVIRONMENTAL IMPACTS

Air Quality Management Plan Consistency

Threshold 4.3a: Would the project conflict with or obstruct implementation of the applicable air quality plan?

The purpose of the AQMP consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. The SCAQMD's CEQA Handbook states that "New or amended General Plan Chapters (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (except as provided for CO in Section 9.4 for relocating CO hot spots).
- (2) Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated below.

Criterion 1 - Increase in the Frequency or Severity of Violations

The proposed project would result in a net increase in regional emissions of PM10 and PM2.5 when comparing the 2009 Existing Conditions to the proposed 2010 General Plan Update (2030) that exceed SCAQMD thresholds, as discussed further below. However, this consistency criterion pertains to local air quality impacts, rather than regional emissions, as defined by the SCAQMD. The SCAQMD has identified CO as the best indicator pollutant for determining whether local air quality violations would occur, as CO hot-spot is most directly related to increase in traffic. The SCAB is now in attainment for the CO standards and exceedances of the CO standards would not be expected. Local air pollutant concentrations would not be expected to exceed the ambient air quality concentration standards due to local traffic, with or without the proposed project. Because the proposed project is not projected to impact the local air quality, the proposed project is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP

Consistency with AQMP assumptions is determined by comparing a proposed project with the assumptions in the 2003 AQMP, which, in turn, is based on projections from local General Plans. Projects that are consistent with the local General Plan are consistent with the 2003 AQMP assumptions. Therefore, the analysis of this criterion for the proposed project involves comparing the existing and proposed General Plans. It should be noted that impacts under CEQA are generally based on comparison to the existing condition, rather than an existing plan, such as the City's existing General Plan. This analysis is an exception to this standard because the 2003 AQMP is based on the City's existing General Plan, and as such the determination of consistency must compare the existing and proposed General Plans.

Although the proposed 2010 General Plan Update land use designations have not changed significantly from the existing General Plan, the proposed land uses are more intensive. Utilizing URBEMIS default assumptions and the proposed 2010 General Plan Update land use data, the average daily trips are projected to be as follows:

- 2,091,263 for the existing 2001 General Plan, and
- 1,978,384 for the proposed 2010 General Plan Update.

As a result, the proposed 2010 General Plan Update would generate a net decrease of 112,879 daily trips from the existing General Plan. As such, the anticipated decrease in the proposed project traffic, does not conflict with projections for the existing 2001 General Plan, and thus the 2003 AQMP. Therefore, the proposed project is considered consistent with the 2003 AQMP and no impact would occur.

Impact 4.3a: The SCAQMD's CEQA Handbook identifies two key indicators of consistency, Criterion 1 and Criterion 2. The proposed 2010 General Plan Update would be consistent with Criteria 1 and 2. Therefore, the 2010 General Plan Update would be consistent with the 2003 AQMP.

Air Quality Standards Violation and Exposure of Sensitive Receptors

Threshold 4.3b: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold 4.3d: Would the project expose sensitive receptors to pollutant concentrations?

Short-Term (Construction) Emissions

The proposed 2010 General Plan Update would not involve specific construction activity. However, construction activities that implement land use policies over the long term would produce air pollutant emissions. Air pollutants would primarily be emitted by construction equipment and fugitive dust would be generated during demolition of the existing improvements as well as during grading and excavation of the individual project sites. MM 4.3-3 describes a range of construction-period measures that the City would require of each future project developed under the proposed 2010 General Plan Update. However, as no specific projects are proposed as part of the proposed 2010 General Plan Update and specific details regarding the scheduling of grading activities are unknown, construction emissions cannot be quantified and the requirements of MM 4.3-3 do not directly apply to the proposed 2010 General Plan Update. Construction emissions would be evaluated on a project-by-project basis.

Long-Term (Operational) Emissions

Project Emissions Calculation Methodology

The proposed 2010 General Plan Update air quality emissions were calculated using the URBEMIS2007 program (version 9.2.4). Default URBEMIS2007 variables were used for the calculations including the trip generation rates. URBEMIS default assumptions for hearth emissions were adjusted to reflect the use of natural gas fireplaces instead of wood-burning fireplaces, in accordance with SCAQMD Rule 445 (SC 4.3-1), for the anticipated 7,797 additional residential units with buildout of the proposed 2010 General Plan Update. URBEMIS2007 calculates summer and winter average emissions in pounds per day. The land uses in terms of dwelling units and square footages as well as default emission factors utilized in calculating the emissions are provided in the appendix to the Air Quality Assessment (Appendix B).

The URBEMIS program was set to calculate emissions for the proposed 2010 General Plan Update Target Density scenario, as it represents the most probable level of development. The Target Density scenario comprises a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

Regional Emissions

The proposed project emissions were analyzed for the Target Density scenario for buildout year 2030. For purposes of comparison, the 2009 Existing Conditions and 2030 Existing General Plan were both calculated, although the basis of the significance determination under CEQA is based on the existing condition. Regarding residential land uses, the number of dwelling units with buildout of the proposed 2010 General Plan Update would exceed the 2009 Existing Conditions by 7,584 units and the existing 2001 General Plan forecast for 2030 by 7,797 units. The estimated maximum daily regional air pollutant emissions from the proposed project as calculated in URBEMIS2007 are presented in 4.3-5. The data utilized in calculating the emissions are provided in the appendix to the Air Quality Assessment (Appendix B).

As shown in Table 4.3-5, the primary source of criteria pollutant emissions with implementation of the proposed 2010 General Plan Update would be generated by motor vehicles. However, the future emissions due to vehicular emissions are projected to be less in 2030 when compared to 2009. This is primarily due to the anticipated decrease in the future emission rates for vehicular sources as projected by the EMFAC2007 program. The number of vehicles actually would increase in the future but is more than offset by the decrease in the emission factors. Hearth emissions from wood burning stoves and fireplaces would also be a substantive portion of total emissions. Other criteria air pollutant emissions would be generated by the combustion of natural gas for space and water heating, the use of landscaping equipment, and architectural coatings during maintenance, as well as off-site emissions from the generation of electricity consumed by the proposed project over the long term.

Table 4.3-5 indicates that the net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NOx, and increase for PM_{2.5}, PM₁₀ and SOx. The net increase in SOx emissions would not exceed the SCAQMD threshold; however, estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds.

**TABLE 4.3-5
ESTIMATED MAXIMUM DAILY EMISSIONS (POUNDS PER DAY)**

Source	CO	VOC	NOx	PM ₁₀	PM _{2.5}	SOx
Existing Conditions (2009)						
Vehicular Emissions	174,696	16,741	29,123	1,646	1,137	130
Natural Gas Combustion	458	71	930	2	2	0
Hearth	24,192	8,724	747	3,752	3,612	68
Landscaping	0	0	0	0	0	0
Consumer Products	0	2,856	0	0	0	0
Architectural Coatings	0	632	0	0	0	0
Total Emissions	199,345	29,024	30,799	5,400	4,750	198
Existing General Plan (2030)						
Vehicular Emissions	57,118	6,610	7,435	1,507	965	148
Natural Gas Combustion	516	75	990	2	2	0
Hearth	24,097	8,691	739	3,737	3,597	68
Landscaping	0	0	0	0	0	0
Consumer Products	0	2,845	0	0	0	0
Architectural Coatings	0	762	0	0	0	0
Total Emissions	81,731	18,984	9,164	5,245	4,564	215
Proposed 2010 General Plan Update (2030)						
Vehicular Emissions	58,725	6,795	7,640	1,548	991	152
Natural Gas Combustion	562	84	1,103	2	2	0
Hearth	26,451	8,973	838	4,121	3,967	76
Landscaping	0	0	0	0	0	0
Consumer Products	0	3,245	0	0	0	0
Architectural Coatings	0	768	0	0	0	0
Total Emissions	85,739	19,865	9,581	5,671	4,960	227
SCAQMD Significance Thresholds	550	55	55	150	55	150
Net Change in Emissions over Existing General Plan (2030)¹	4,008	881	416	426	396	12
Net Change in Emissions over Existing Conditions (2009)	-113,607	-9,159	-21,218	271	210	30
Net Change over Existing Conditions Significant?	NO	NO	NO	YES	YES	NO
¹ Net change in emissions over the Existing General Plan provided for reference only. The CEQA analysis of long-term regional emissions is based on comparison to existing conditions (2009). Source: Mestre Greve Associates 2010a.						

The proposed 2010 General Plan Update includes many goals and policies, described above, that would reduce long-term criteria air pollutant emissions. Also, MM 4.3-1 and MM 4.3-2 describe a range of measures to be applied to future projects, as feasible, to reduce emissions. However, the anticipated reduction in emissions with implementation of such measures is not quantifiable at this time. Therefore, the proposed project would be considered to have a significant and unavoidable direct impact related to emissions of PM10 and PM2.5, and a less than significant direct impact related to emissions of CO, VOC, NOx and SOx.

Diesel Particulate Matter Emissions

In 1998, the CARB identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). The CARB Air Quality and Land Use Handbook describes that diesel fueled vehicles that emit DPM from nearby freeways or rail yards could be a problem for any residential areas within 500 feet of freeways and 1,000 feet of rail yards or related distribution centers. TAC impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime. There are no rail yards in the City of Rancho Cucamonga. Additionally, there are no new residential land uses proposed next to freeways. As a result, there would be less than significant impacts related to TAC emissions from the proposed 2010 General Plan Update.

Impacts 4.3b and 4.3 d: The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NOx, and increase for PM_{2.5}, PM₁₀ and SOx. The net increase in SOx emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. Implementation of identified 2010 General Plan Update goals and policies and SC 4.3-1 as well as MMs 4.3-1 through 4.3-3, as feasible, would reduce long-term criteria air pollutant emissions; however, these reductions are not quantifiable at the time. Therefore, the anticipated net increase in PM10 and PM2.5 emissions would be considered a significant and unavoidable direct impact.

Cumulative Impacts

Threshold 4.3c: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable NAAQS or CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

The geographic context for analysis of cumulative air quality impacts related to the proposed 2010 General Plan Update is the South Coast Air Basin (SCAB). As discussed above, the SCAB is designated non-attainment at the Federal and State level for ozone (VOC and NOx are ozone precursors), PM10 and PM2.5.

Implementation of the proposed 2010 General Plan Update would result in a substantial reduction in net emissions of VOC and NOx compared to the Existing Condition (2009). This would be a beneficial impact, and as such would be a less than significant direct and cumulative impact related to emissions of ozone precursors. As discussed above, the proposed 2010 General Plan Update would result in a significant and unavoidable direct impact related to emissions of PM10 and PM 2.5 with implementation of identified 2010 General Plan Update goals and policies, MM 4.3-1 and MM 4.3-2, as feasible. Therefore, because SCAB is designated non-attainment for particulates, this significant and unavoidable direct impact would also be a significant and unavoidable cumulative impact for PM10 and PM2.5.

Impact 4.3c: The SCAB is designated non-attainment for ozone (VOC and NO_x are ozone precursors), PM₁₀ and PM_{2.5}. The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for VOC and NO_x, resulting in a less than significant direct and cumulative impact related to emissions of ozone precursors. Estimated net emissions of PM_{2.5} and PM₁₀ would result in a significant and unavoidable direct impact. Therefore, because SCAB is designated non-attainment for particulates, this significant and unavoidable direct impact would also be a significant and unavoidable cumulative impact for PM₁₀ and PM_{2.5} after implementation of proposed 2010 General Plan Update goals and policies, MM 4.3-1 and MM 4.3-2, as feasible.

Odors

Threshold 4.3e: Would the project create objectionable odors affecting a substantial number of people?

Construction (Short-term)

Construction activities associated with implementation of individual projects during buildout of the proposed 2010 General Plan Update would have the potential to use equipment and perform activities that would generate odors. Potential construction odors include diesel equipment exhaust, roofing, painting, and paving. These odors would be temporary and would dissipate rapidly from the source with an increase in distance. Therefore, the impacts would be short-term, would not affect a substantial number of people, and would be less than significant.

Operation (Long-term)

During long-term implementation of the proposed 2010 General Plan Update, some odors associated with residential uses would be expected to occur, such as from cooking and gardening. Similarly, common odors associated with mixed-use and commercial land uses would be expected to occur, such as from restaurants. However, these types of odors are not generally considered objectionable. Local odors from the majority of land uses in the City would be no different than in any other urban area and would not be considered significant. The most likely potential nuisance odors would be from future industrial or utility sources, such as wastewater treatment plants, landfills, transfer facilities, materials recycling facilities (MRFs), refineries, and asphalt plants. These are the potential industrial land uses found within or near urban areas that can create what are generally considered to be objectionable odors.

The distribution of land uses with implementation of the proposed 2010 General Plan Update would be essentially the same as the existing condition, with intensification of land uses in selected areas. Therefore, the location of industrial land use designations in relation to residential land use areas and other sensitive receptors for odors would be similar to the existing condition, wherein there are no sources of objectionable odors. As discussed in Section 4.17, Utilities and Service Systems, neither wastewater treatment infrastructure nor solid waste facilities are expected to require expansion associated with buildout of proposed 2010 General Plan Update. Also, individual projects proposed in the City would be required to comply with the California Environmental Quality Act (CEQA), including this threshold as provided in Appendix G of the State CEQA Guidelines. Therefore, implementation of the proposed 2010 General Plan Update is not anticipated to result in the generation of objectionable odors affecting a substantial number of people and there would be a less than significant impact.

Impact 4.3e: Construction activity odors related to buildout of the proposed 2010 General Plan Update would be temporary and would not be experienced by a substantial number of people. Buildout of the proposed 2010 General Plan Update is anticipated to result in common local odors in an urban setting, such as from cooking/restaurants, gardening, and industrial land uses. The overall distribution of land uses would remain similar to the existing condition, wherein there are no sources of objectionable odors affecting sensitive receptors (such as residential land uses). Also, all future projects would be required to comply with CEQA, including the assessment of odor. Therefore, implementation of the proposed 2010 General Plan Update is not anticipated to result in the generation of objectionable odors affecting a substantial number of people and there would be a less than significant impact.

4.3.7 CUMULATIVE IMPACTS

Refer to Threshold 4.3c impact analysis, above, for a discussion of cumulative impacts.

4.3.8 MITIGATION MEASURES

MM 4.3-1 The City of Rancho Cucamonga shall work with the applicants of future projects to be developed under the proposed 2010 General Plan Update to implement the following measures, derived from the SCAQMD's AQMP, where feasible, in order to reduce criteria air pollutant emissions, primarily related to vehicular travel and energy. Potential measures for consideration in future projects include:

- Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides.
- Provide preferential parking to high occupancy vehicles and shuttle services.
- Schedule truck deliveries and pickups during off-peak hour.
- Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors.
- Landscape with native and/or drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure.
- Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations.

MM 4.3-2 The City of Rancho Cucamonga has developed the following requirements for specified land uses to reduce criteria pollutant emissions. These measures shall be verified either during review of project plans and specifications. Measures to be enforced include:

- All industrial and commercial facilities shall post signs requiring that trucks shall not be left idling for prolonged periods (i.e., in excess of 10 minutes).
- All industrial and commercial facilities shall designate preferential parking for vanpools.
- All industrial and commercial site tenants with 50 or more employees shall be required to post both bus and Metrolink schedules in conspicuous areas.
- All industrial and commercial site tenants with 50 or more employees shall be required to configure their operating schedules around the Metrolink schedule to the extent reasonably feasible.
- All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters.
- All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping.

MM 4.3-3

The City of Rancho Cucamonga shall ensure that future projects to be developed under the proposed 2010 General Plan Update implement the following construction-period measures to reduce criteria pollutant emissions, including, but not limited to, compliance with SCAQMD Rules as described below. These measures shall be verified either during review of project plans and specifications and/or during construction. Construction-period measures to be enforced include:

- All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per manufacturers' specifications. Maintenance records shall be available at the construction site for City verification.
- Prior to the issuance of any grading permits, the developer shall submit Construction Plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low-emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District (SCAQMD) as well as City Planning staff.
- The construction contractor shall utilize electric or clean alternative fuel-powered equipment where feasible.
- The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use.
- All construction equipment shall comply with SCAQMD Rules 402 (Nuisance) and Rule 403 (Fugitive Dust Control).
- All asphalt shall meet or exceed performance standards noted in SCAQMD Rule 1108 (Cutback Asphalt).

- All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113 (Architectural Coatings). Paints and coatings shall be applied either by hand or high-volume, low-pressure spray.

4.3.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Air Quality Management Plan Consistency

No Impact.

Air Quality Standards Violation and Exposure of Sensitive Receptors

Significant and Unavoidable for Long-term Regional Emissions.

Less Than Significant for PM10 and PM2.5.

Less than Significant for VOC, NOx, CO, SOx and TACs.

Cumulative

Significant and Unavoidable for PM10 and PM2.5.

Less than Significant for VOC and NOx.

Odors

Less Than Significant.

4.4 BIOLOGICAL RESOURCES

This section analyzes potential Biological Resource impacts associated with implementation of the proposed General Plan. Information in this section has been prepared in accordance with CEQA guidelines.

4.4.1 RELEVANT POLICIES AND REGULATIONS

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) protects plants and animals that the government has listed as “Endangered” or “Threatened”. A Federally listed species is protected from unauthorized “take”, which is defined in the FESA as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct”. All persons are presently prohibited from taking a Federally listed species unless and until: (1) the appropriate Section 10(a) permit has been issued by the U.S. Fish and Wildlife Service (USFWS) or (2) an Incidental Take Statement is obtained as a result of formal consultation between a Federal Agency and the USFWS pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 *Code of Federal Regulations* [CFR] 402). “Person” is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the Federal government; any State, Municipality, or political subdivision of the State; or any other entity subject to the jurisdiction of the United States.

Clean Water Act/River and Harbors Act

The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates activities that discharge dredged or fill materials into “Waters of the U.S.”¹ under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all “Waters of the U.S.” where the material has the effect of: (1) replacing any portion of “Waters of the U.S.” with dry land or (2) changing the bottom elevation of any portion of “Waters of the U.S.”.

Section 401 of the CWA provides the Regional Water Quality Control Board (RWQCB) with the authority to regulate, through a Water Quality Certification, any proposed Federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide “certification that there is reasonable assurance that an activity which may result in the discharge to ‘waters of the U.S.’ will not violate water quality standards”. Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine Regional Boards’ Basin Plans.

Development allowed within any identified jurisdictional areas in the proposed General Plan Update Study Area (which includes the City of Rancho Cucamonga and its related SOI) may be subject to requirements under Sections 401 and 404 of the CWA. This includes filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing

¹ “Waters of the U.S.” include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce.

other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

Executive Order 11990

Executive Order 11990 directs Federal agencies (1) to minimize the destruction, loss, or degradation of wetlands and (2) to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities. Each agency shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction and (2) that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. In making this finding, the head of the agency may take into account economic, environmental, and other pertinent factors.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act of 1918, Federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [USC], Section 703), except as allowed by permit pursuant to 50 CFR 21. The statute states:

Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions.

In 1972, the Migratory Bird Treaty Act was amended to include protection for migratory birds of prey (e.g., raptors).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act and Section 2081 of the *California Fish and Game Code*, an Incidental Take Permit from the California Department of Fish and Game (CDFG) is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under the California Endangered Species Act, "take" is defined as an activity that would directly or indirectly kill an individual of a species. If a species is listed by the Federal and State governments as Threatened or Endangered, a consistency finding in accordance with Section 2080.1 of the CESA is issued when a project is deemed consistent with an existing USFWS Biological Opinion (BO), pursuant to Section 7 of the FESA.

Porter-Cologne Act

The Porter-Cologne Act provides the State with very broad authority to regulate “Waters of the State”.² Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a “Report of Waste Discharge” when there is no Federal nexus, such as under Section 404(b)(1) of the Clean Water Act. Although “waste” is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

California Fish and Game Code

“Waters of the State”

Sections 1600–1616 of the *California Fish and Game Code* protect “Waters of the State”. Activities of State and local agencies, as well as public utilities that are project proponents, are regulated by the CDFG under Section 1602 of the code; this section regulates any work that would (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For project activities (described above) that may affect stream channels and/or riparian vegetation regulated under Sections 1600 through 1603, CDFG authorization is required in the form of a Streambed Alteration Agreement.

Birds of Prey and Migratory Birds

Sections 3503 and 3503.5 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy the nests and eggs of birds of prey.

Section 3513 of the *California Fish and Game Code* duplicates the Federal protection of migratory birds and prohibits taking and possession of any migratory nongame bird, as designated in the Migratory Bird Treaty Act.

CDFG Review

As a trustee agency, the CDFG has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (14 *California Code of Regulations* [CCR] Section 15386). The CDFG, as a trustee agency, must be notified of CEQA documents regarding projects involving wildlife of the State as well as Rare and Endangered native plants,³ wildlife areas, and ecological reserves. As a trustee agency the CDFG cannot approve or

² The Porter-Cologne Act defines “Waters of the State” as “any surface water or groundwater, including saline waters, within the boundaries of the state” (this includes the rivers, streams, or lakes protected by Sections 1600–1616 of the *California Fish and Game Code*).

³ Section 15380 of CEQA indicates that a lead agency can consider a non-listed species (e.g., California Native Plant Society [CNPS] List 1B and 2 plants) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “Rare” or “Endangered”. A “Rare” species is one which (1) although not presently threatened with extinction, is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or (2) is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” by the FESA. An “Endangered” species is one whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors.

disapprove a project; however, lead and responsible agencies are required to consult with them. The CDFG, as the trustee agency for wildlife resources, shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from buildout of the proposed General Plan Update Study Area and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code*, Section 1802).

County

The County of San Bernardino Code of Ordinances (Title 8, Division 8, Chapter 88.01: Plant Protection and Management) provides regulations and guidelines for managing plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. A Tree or Plant Removal Permit is required for the removal of regulated trees and plants. Regulated trees and plants are identified in Section 88.01.070(b) (Regulated Trees) and Section 88.01.080(b) (Regulated Riparian Plants).

Trees protected by Section 88.01.070(b) include (1) any living, native tree with a 6-inch or greater stem diameter or 19 inches in circumference measured 4.5 feet above natural grade level and (2) 3 or more palm trees in linear plantings which are 50 feet or greater in length within established windrows⁴ or parkway plantings.

Riparian plants are regulated in riparian areas located on private land within unincorporated areas of the County and on public land owned by the County, unless exempt. Section 88.01.080(b) applies to the removal of vegetation within 200 feet of the bank of a stream⁵ or in an area indicated as a protected riparian area on an overlay map or Specific Plan.

Local

The City's Tree Preservation Ordinance in the Municipal Code (Title 19, Environmental Protection - Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection. A permit is required for the removal, relocation, or destruction of a Heritage Tree.⁶

4.4.2 EXISTING CONDITIONS

The City of Rancho Cucamonga and adjacent SOI are located on the U.S. Geological Survey's (USGS's) Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti 7.5-minute quadrangles. The City is located in the foothills of the eastern end of the San Gabriel Mountains and west of the San Bernardino Mountains. The City's SOI extends into the San Bernardino National Forest. The topography of the City slopes downward from the foothills in the north. Elevations in the City range from 1,018 to 1,600 feet above mean sea level (msl). The northern edge of the City's SOI is at approximately 5,200 feet above msl. North of the SOI, elevations increase to Cucamonga Peak, Bighorn Peak, Ontario Peak, Sugarloaf Peak, and Mount Baldy. Soils in the proposed General Plan Update Study Area include Cieneba sandy loam

⁴ A windrow is a continuous row of trees originally planted to create a windbreak or physical separation between two uses.

⁵ "Stream" includes those shown on USGS topographic quadrangle maps as perennial or intermittent, blue or brown lines (solid or dashed), and river wash areas.

⁶ A Heritage Tree is defined as any tree, shrub, or plant meeting at least one of the following criteria: (1) eucalyptus windrows; (2) woody plants in excess of 15 feet in height and having a single trunk circumference of 15 inches or more measured 24 inches from ground level; (3) multi-trunk trees having a total circumference of 30 inches or more measured 24 inches from ground level; (4) a stand of trees the nature of which makes each dependent upon the others for survival; or (5) any other tree as may be deemed historically or culturally significant by the Planning Director because of size, condition, location, or aesthetic qualities.

(9–15 percent slopes), Cieneba-Rock Outcrop Complex, Delhi fine sand, Grangeville fine sandy loam, Grangeville fine sandy loam (saline-alkali), Greenfield sandy loam (2–9 percent slopes and 9–15 percent slopes), Hanford coarse sandy loam (2–9 percent slopes and 9–15 percent slopes), Hanford sandy loam (0–2 percent slopes), Psamments and Fluvents (frequently flooded), Ramona sandy loam (2–9 percent slopes; 9–15 percent slopes; and 15–30 percent slopes, eroded), Saugus sandy loam (30–50 percent slopes), Soboba gravelly loamy sand (0–9 percent slopes), Soboba stony loamy sand (2–9 percent slopes), Tujunga loamy sand (0–5 percent slopes), and Tujunga gravelly loamy sand (0–9 percent slopes) (USDA NRCS 2007). Numerous streams in the Santa Ana Watershed (USGS Cataloging Unit 18070203) drain from the north into the proposed General Plan Update Study Area. The western edge of the Study Area runs along Cucamonga Creek. Other creeks flowing through the City include Deer Creek, Day Creek, and Etiwanda Creek.

Open Space Areas

The proposed Land Use Plan for the proposed General Plan Update Study Area includes 6,024 acres, or approximately 25 percent of the Study Area, devoted to open space. These areas include parks, undeveloped parcels, conservation areas, and flood-control/utility corridors. Hillside residential and very low-density residential areas also contribute to the rural character in the northern portion of the Study Area.

Five conservation areas have been established to protect alluvial fan sage scrub habitat within the proposed General Plan Update Study Area. These conservation areas were created as mitigation banks for private and public works projects. They include the 760-acre North Etiwanda Preserve, the 200-acre Day Creek Preserve, the 137-acre San Sevaine Spreading Grounds, the 880-acre U.S. Forest Service Conservation Area, and the 35-acre Existing Conservation Area. In addition to alluvial fan sage scrub, these conservation areas protect habitats such as sycamore alluvial woodland, California walnut woodland, and fresh water marsh.

Methodology

BonTerra Consulting conducted a literature search to identify special status plants, wildlife, and habitats known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the USGS Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti 7.5-minute quadrangles). Sources reviewed include (1) database searches of the California Natural Diversity Database (CNDDDB) (CDFG 2009) and the California Native Plant Society's (CNPS's) Electronic Inventory of Rare and Vascular Plants of California (CNPS 2009); (2) the *South Coast Missing Linkages Project: A Linkage Design for the San Gabriel-San Bernardino Connection* (Penrod et al. 2004); (3) the most recent Federal Register listing package and critical habitat determination for each Federally listed Endangered or Threatened species reported from the vicinity of the proposed General Plan Update Study Area; (4) the *Rancho Cucamonga General Plan Update: Draft Environmental Impact Report* (Rancho Cucamonga 2001c); and (5) other biological studies conducted within the Study Area.

BonTerra Consulting Ecologists Allison Rudalevige and Lindsay Messett conducted a windshield survey in the proposed General Plan Update Study Area. The purpose of the survey was to identify and map vegetation types within the Study Area at a planning level based on previous review of aerial photographs. The survey consisted of driving public and dirt roads throughout the proposed General Plan Update Study Area, with frequent stops to observe habitats, watercourses, plants, and wildlife at a reconnaissance level. Binoculars were used to observe habitats and wildlife beyond fences and in areas that were inaccessible. To avoid trespassing, vegetation mapping on private property was done using binoculars and aerial

photograph interpretation. Areas that could not be viewed through binoculars were not mapped. A representative list of plant and wildlife species observed during the survey is included in Appendix C.

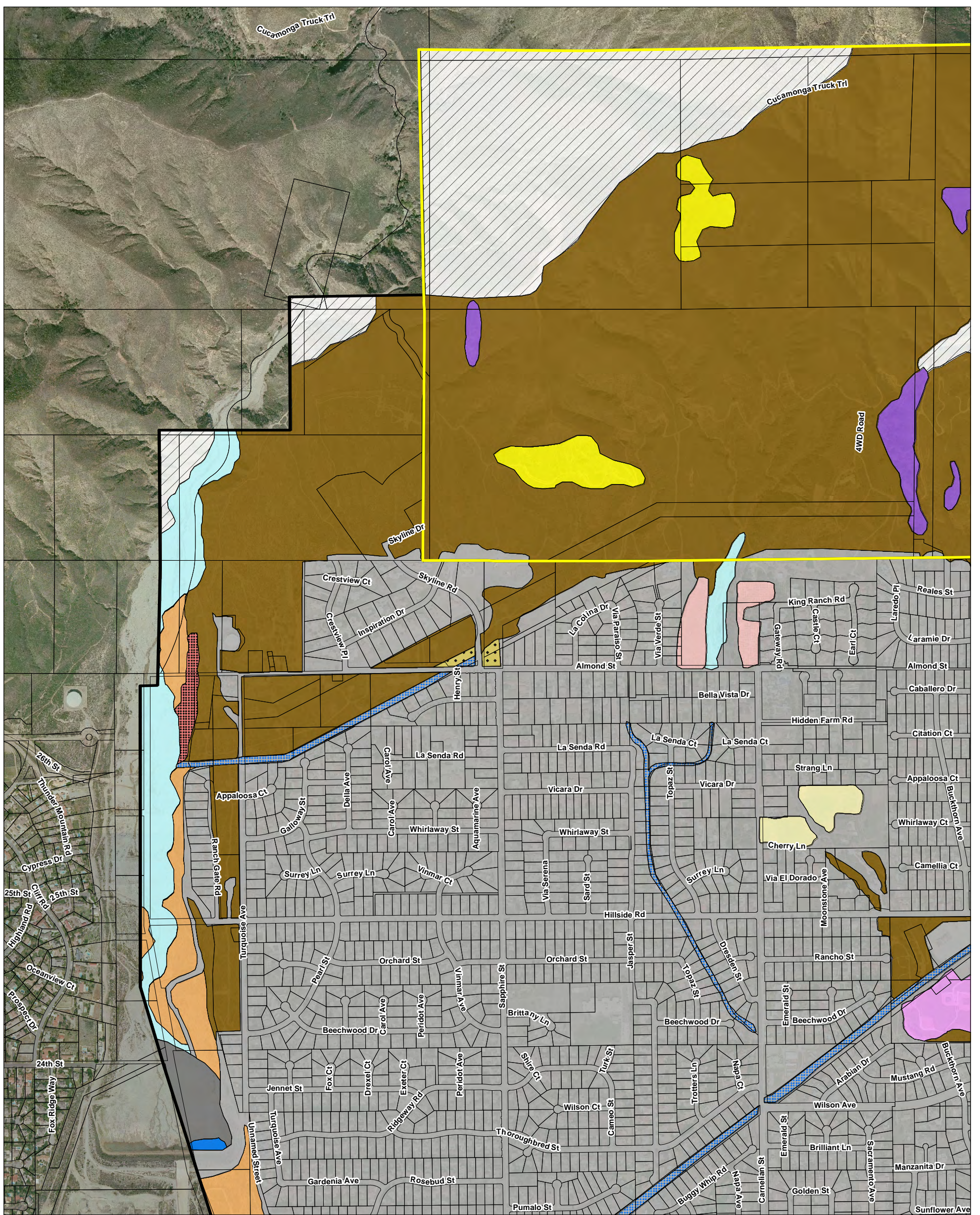
Nomenclature for vegetation types generally follows that of *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 2009). Vegetation was mapped in the field on aerial photographs at a scale of 1 inch equals 600 feet (1" = 600'). Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys in Hickman (1993), Munz (1974), Abrams (1923, 1944, 1951), and Abrams and Ferris (1960). Taxonomy follows Hickman (1993) or current scientific journals for scientific and common plant names. Taxonomy for wildlife generally follows Fisher and Case (1997) and Stebbins (2003) for amphibians and reptiles, American Ornithologists' Union (2008) for birds, and Baker et al. (2003) for mammals.

Vegetation Types and Other Areas

Eighteen vegetation types and other areas not containing vegetation occur in the proposed General Plan Update Study Area (Exhibit 4.4-1, Vegetation Types; Table 4.4-1). Table 4.3-1 identifies the approximate acreage for the vegetation types and other areas in the Study Area. A representative list of plant species observed during vegetation mapping is included in Appendix C.

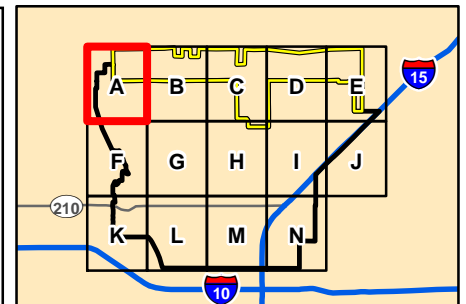
**TABLE 4.4-1
EXISTING VEGETATION TYPES AND OTHER AREAS IN THE RANCHO
CUCAMONGA PROPOSED GENERAL PLAN UPDATE STUDY AREA**

Vegetation Type or Other Area	Existing (Acres)		
	City Boundary	Sphere of Influence	Total
California Sycamore Woodland	0	20	20
Coast Live Oak Woodland	3	11	14
Coast Live Oak – California Sycamore Woodland	0	40	40
Red Willow Thicket	4	19	23
Chaparral	6	74	80
Mixed Sage Scrub	427	2,738	3,165
Scale Broom Scrub	1,454	2,324	3,778
Alluvial Wash	76	83	159
Mulefat Thickets	8	0	8
Grassland	0	70	70
Annual Brome Grassland	358	30	388
Ruderal	489	0	489
Ornamental	926	0	926
Orchard – Agriculture	293	0	293
Disturbed	229	0	229
Channel	318	30	348
Developed/Ornamental	21,018	358	21,376
Open Water	94	0	94
Not Mapped	18	257	275
Total	25,721	6,054	31,775



City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

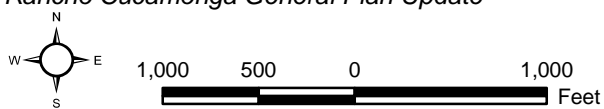
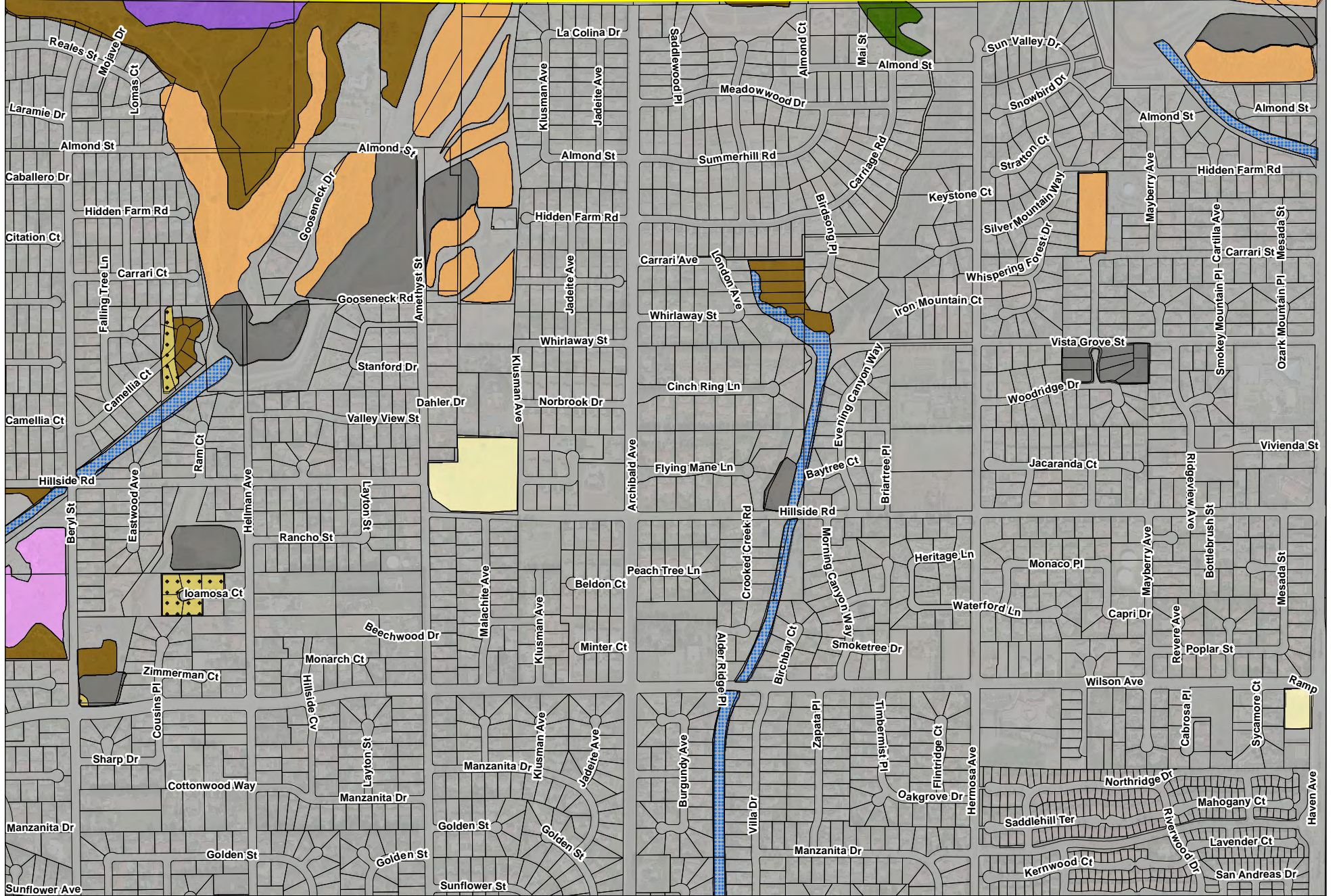
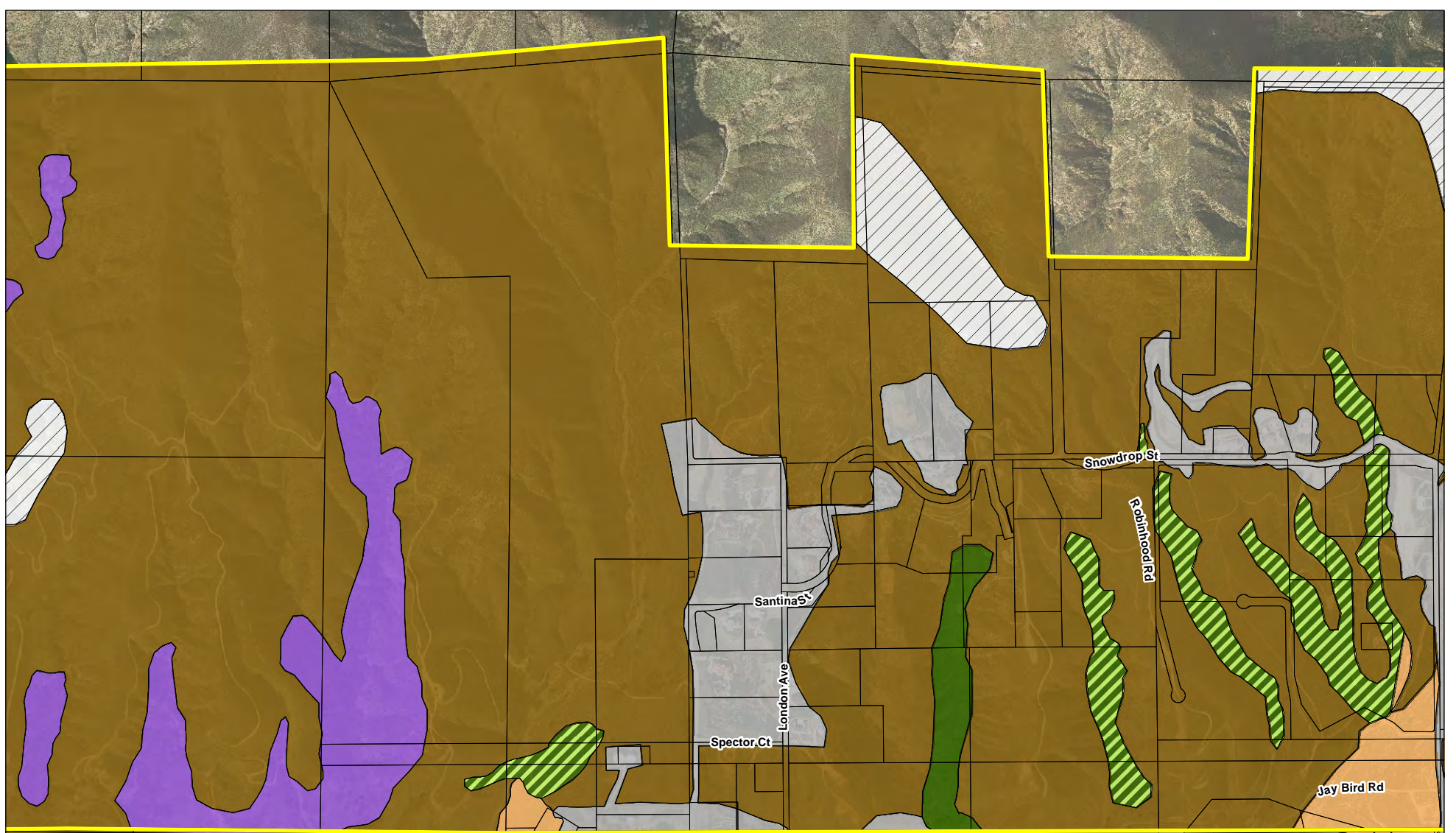


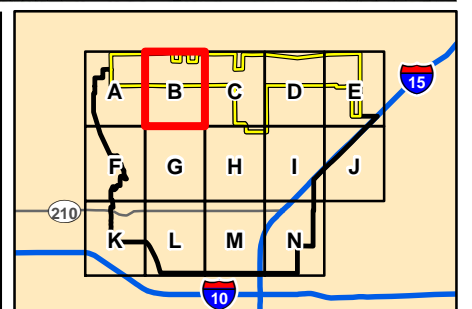
Exhibit 4.4-1A





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

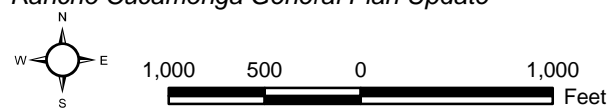
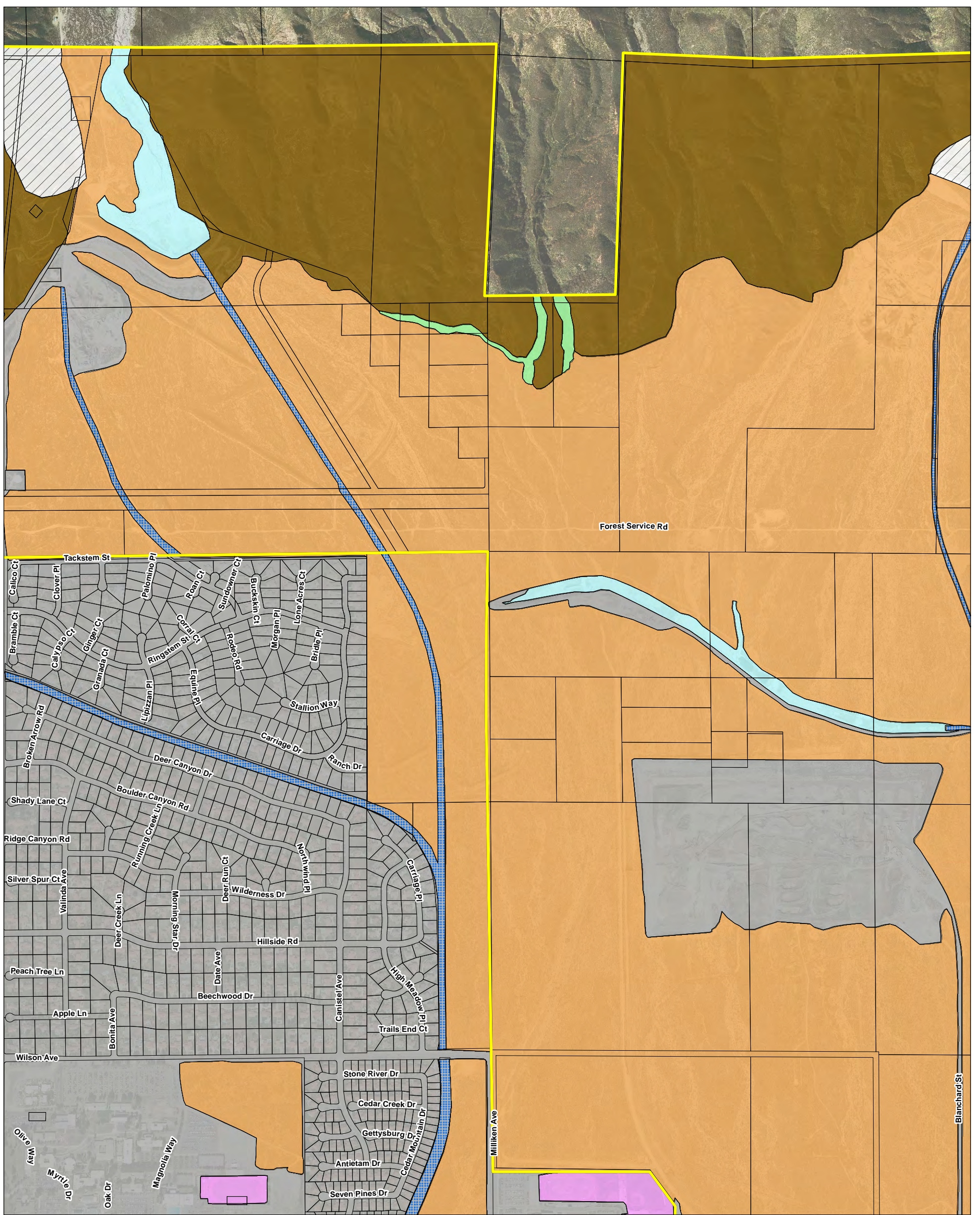


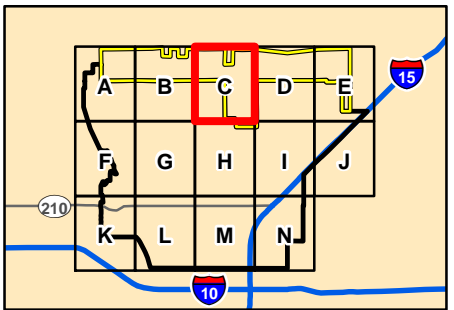
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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types
Rancho Cucamonga General Plan Update

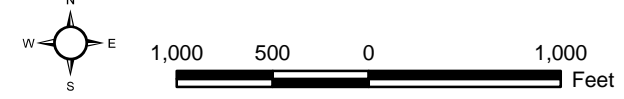
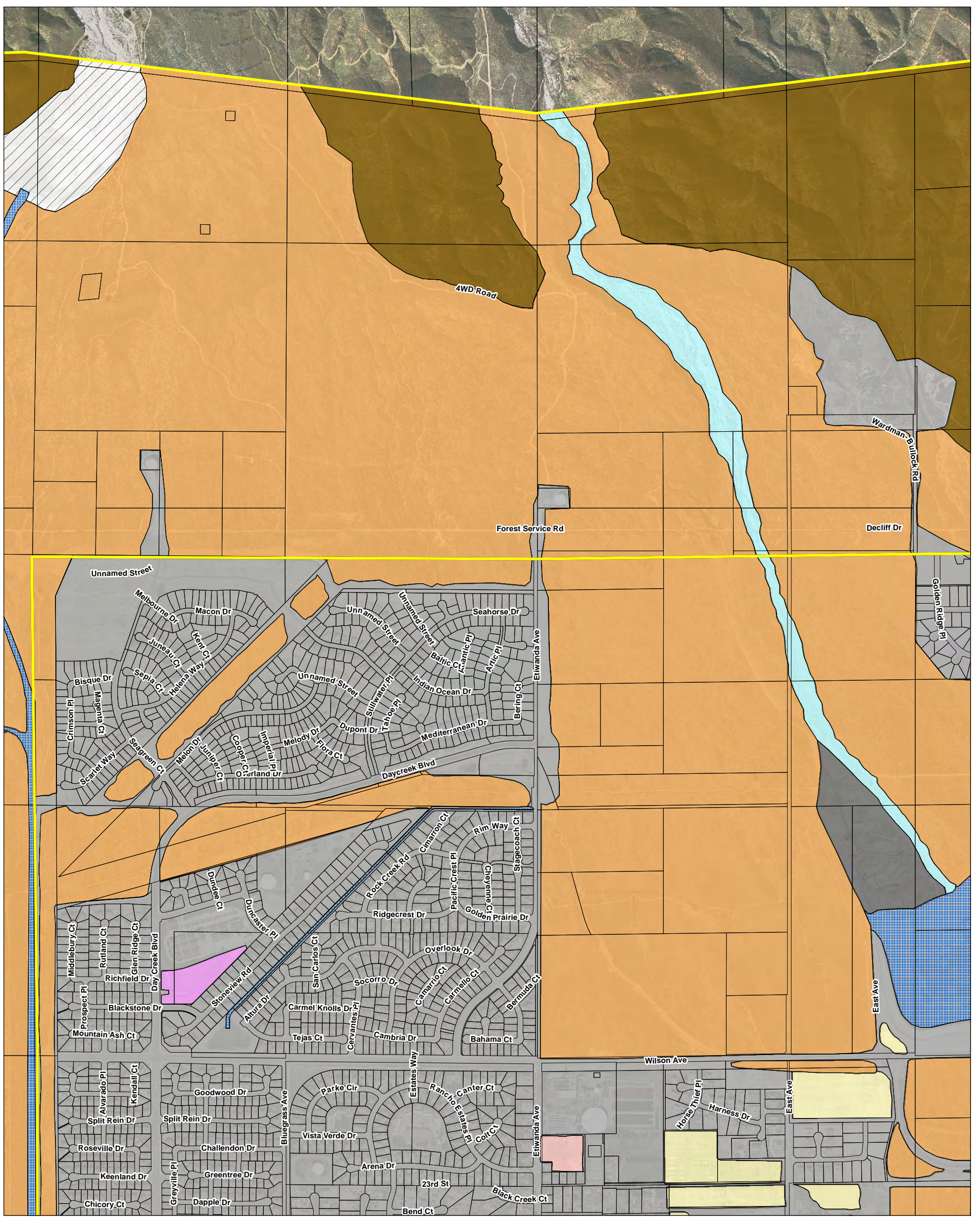


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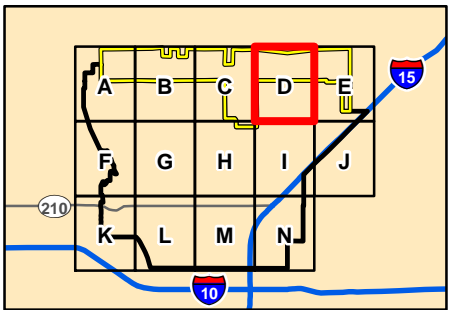


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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

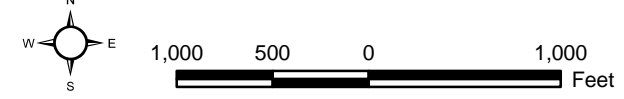
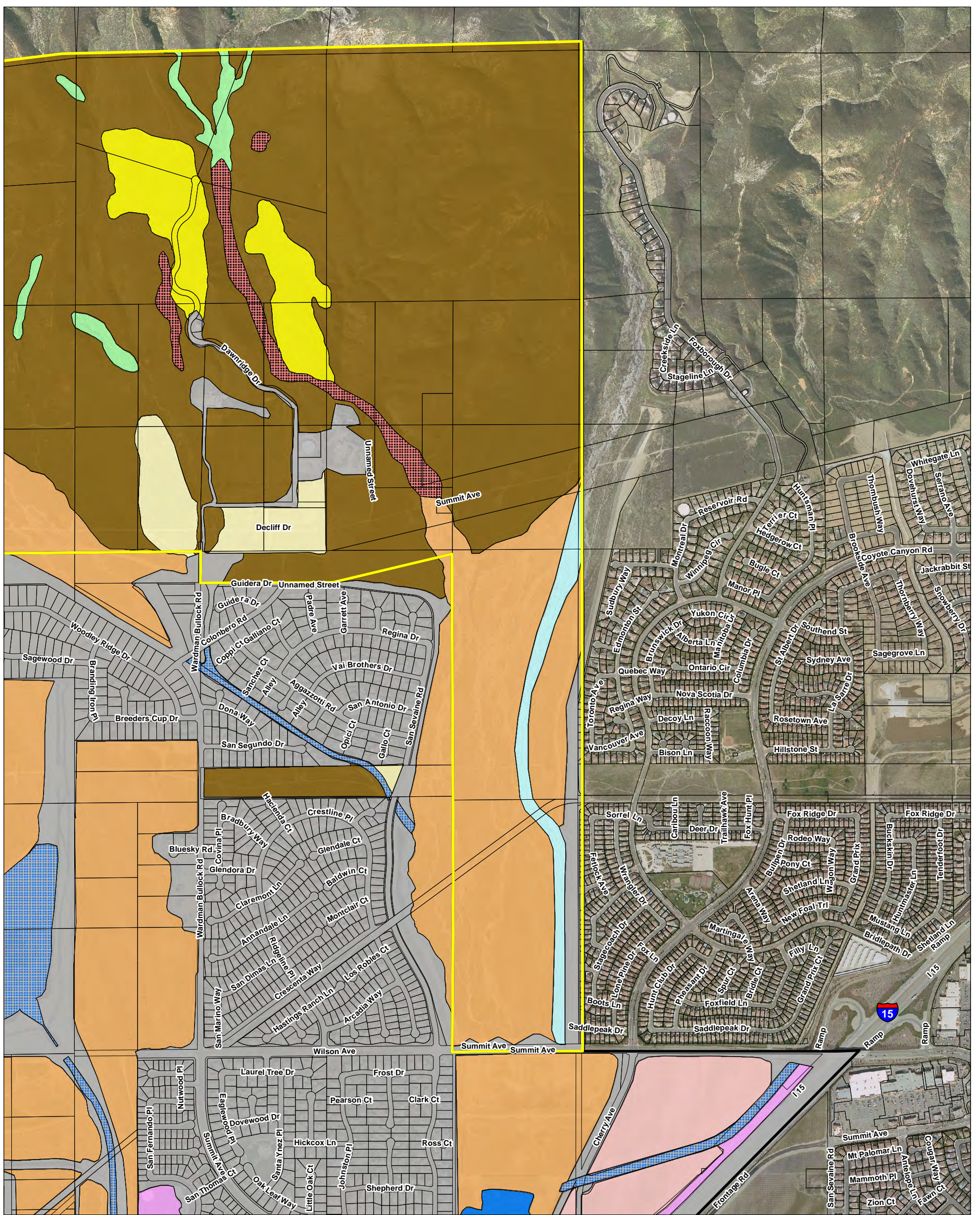


Exhibit 4.4-1D



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City Of Rancho Cucamonga

Sphere of Influence

Vegetation

California Sycamore Woodland

Coast Live Oak Woodland

Coast Live Oak - California Sycamore Woodland

Red Willow Thicket

Chaparral

Mixed Sage Scrub

Scale Broom Scrub

Alluvial Wash

Mule Fat Thicket

Grassland

Annual Brome Grassland

Ruderal

Ornamental

Orchard - Agriculture

Disturbed

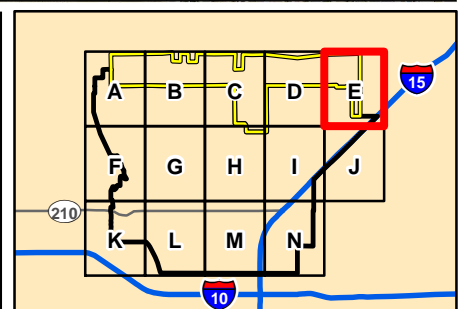
Channel

Developed/Ornamental

Open Water

Not Mapped

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

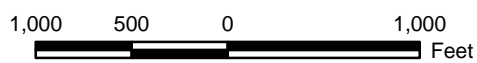
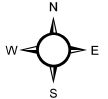
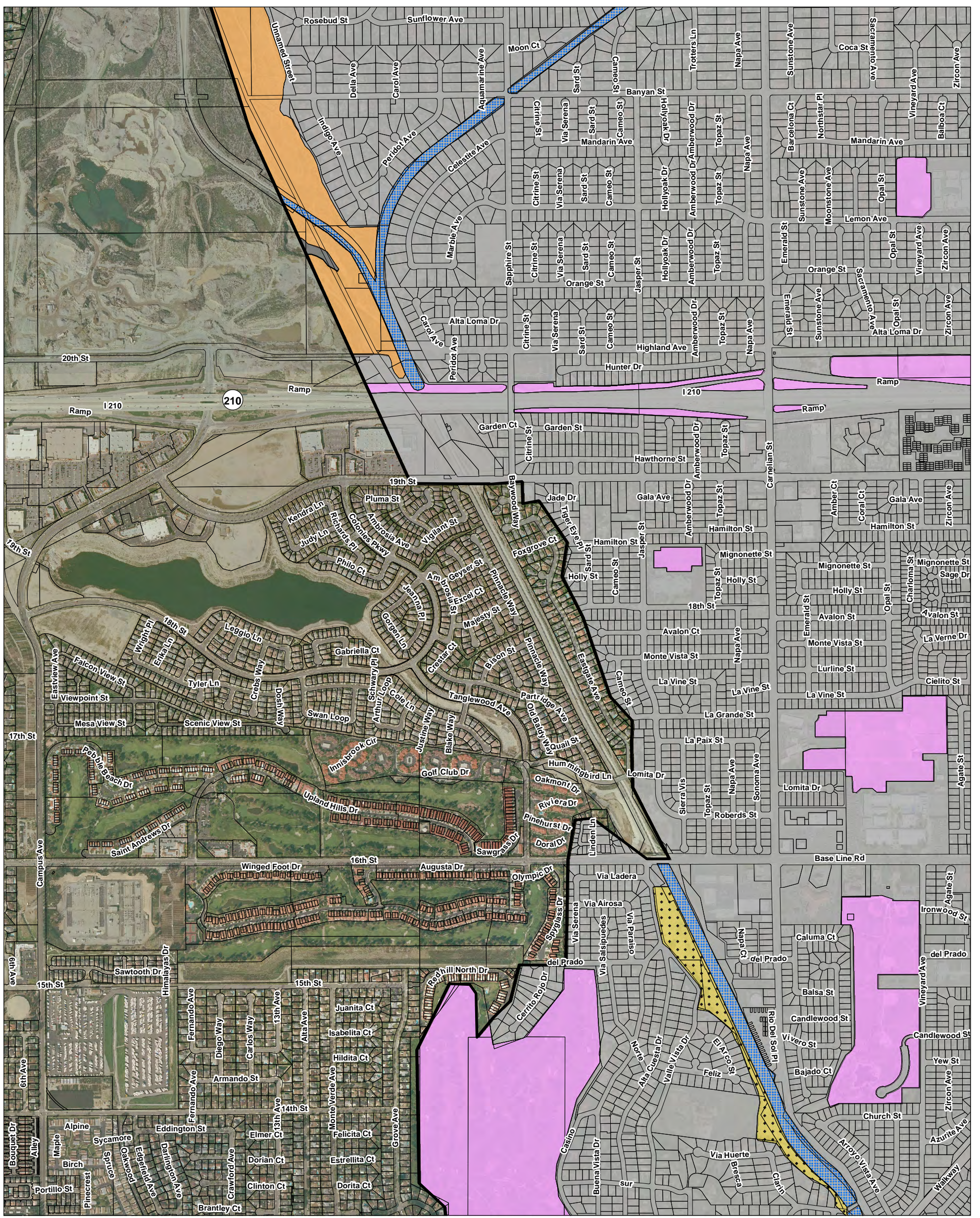
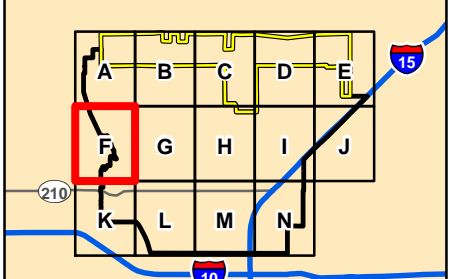


Exhibit 4.4-1E





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

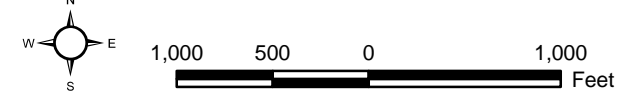
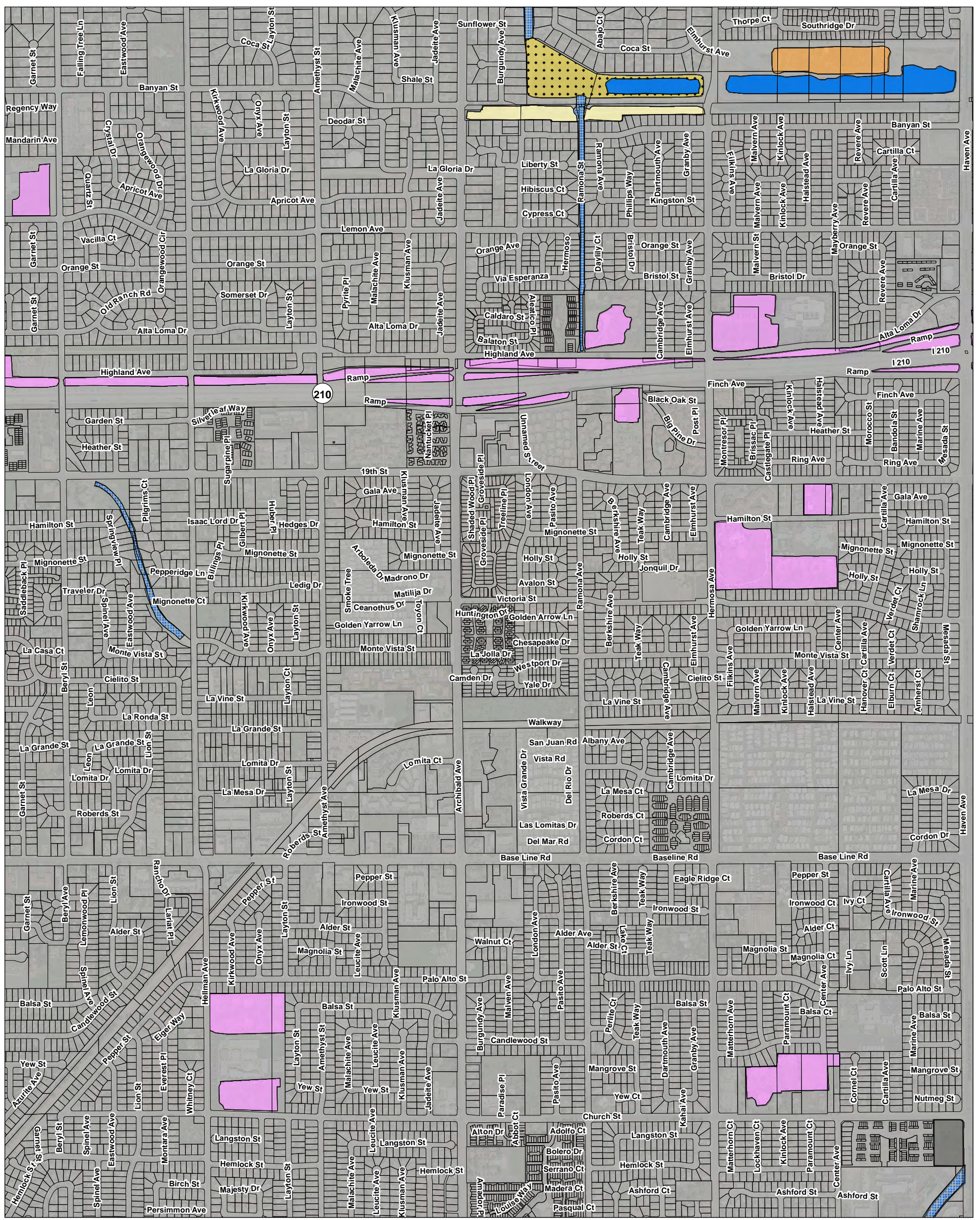


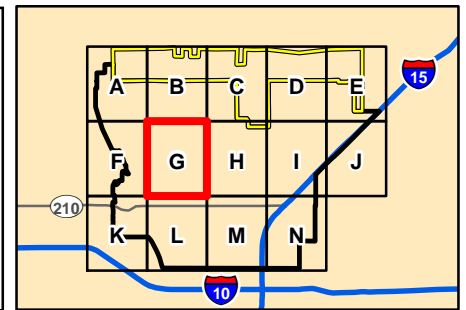
Exhibit 4.4-1F



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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

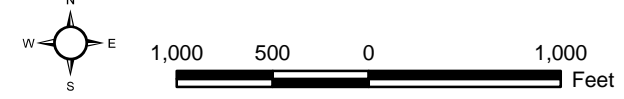
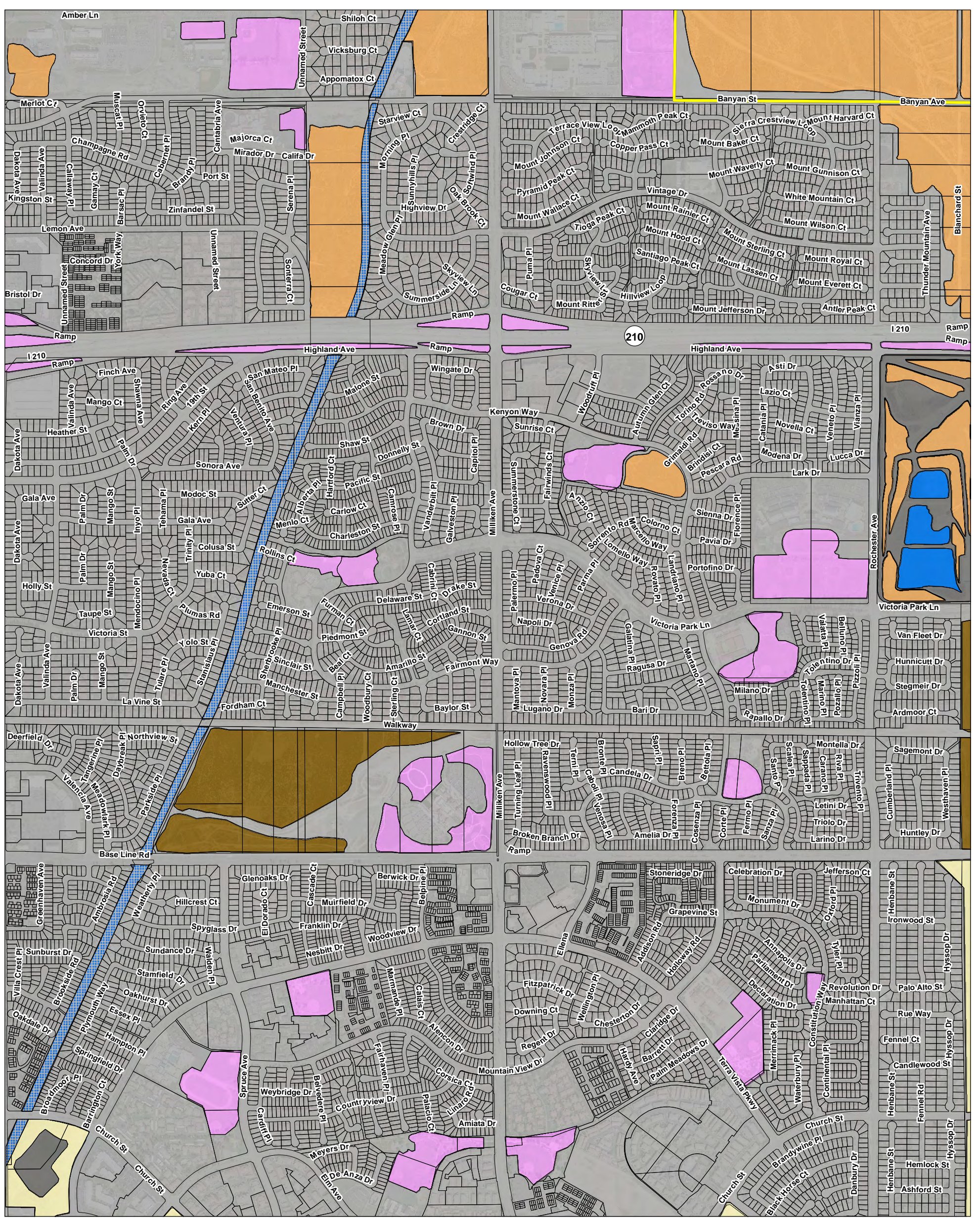


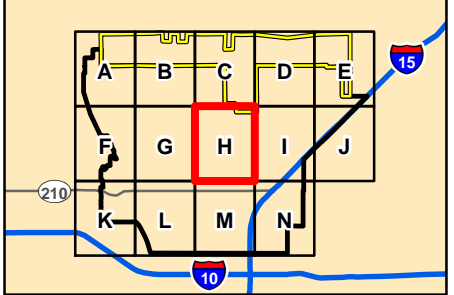
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City Of Rancho Cucamonga	Red Willow Thicket	Grassland
Sphere of Influence	Chaparral	Annual Brome Grassland
Vegetation	Mixed Sage Scrub	Ruderal
California Sycamore Woodland	Scale Broom Scrub	Ornamental
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed
	Channel	Developed/Ornamental
		Open Water
		Not Mapped



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

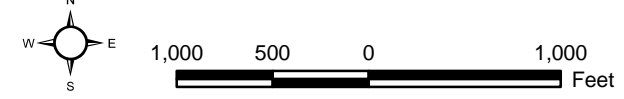
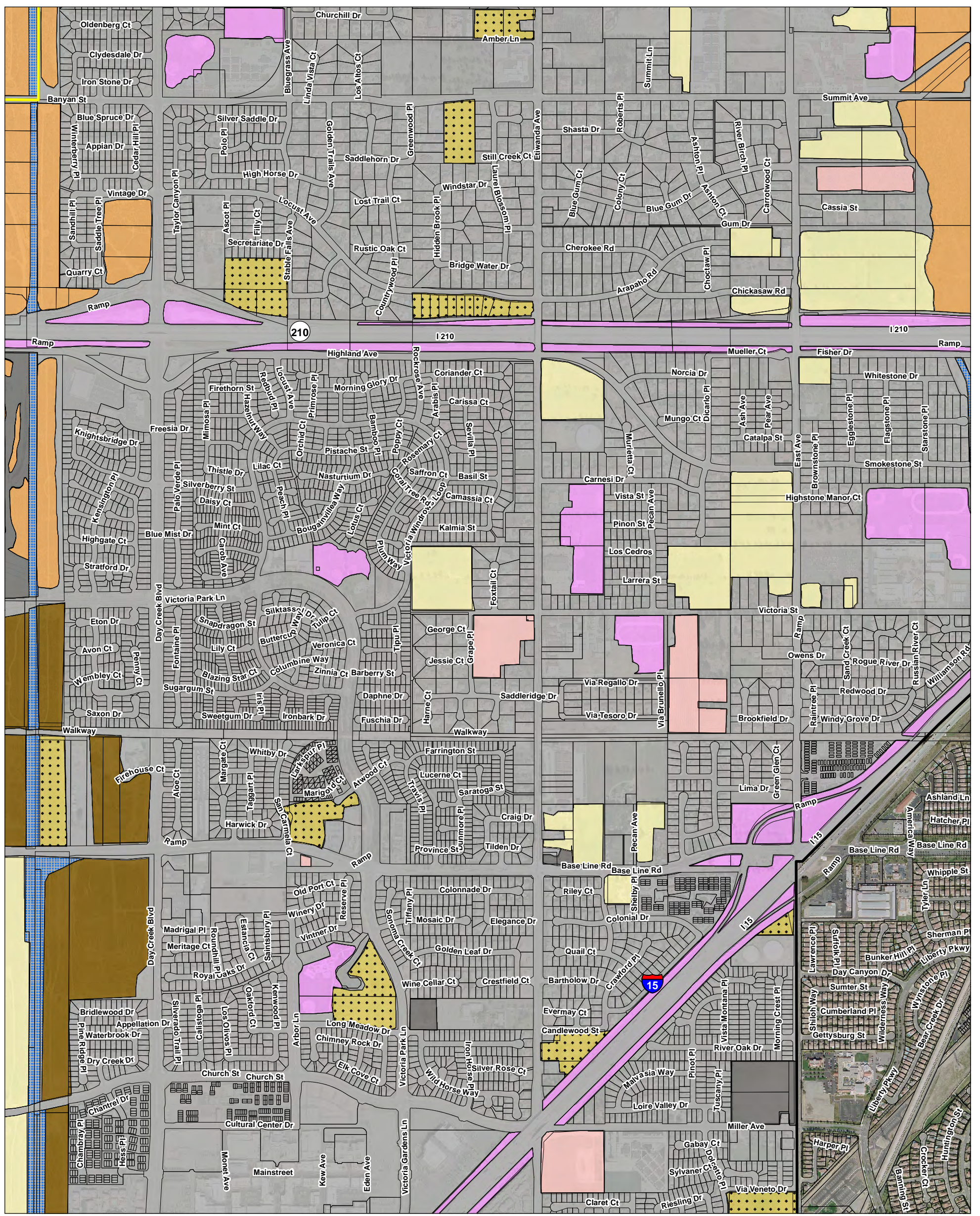


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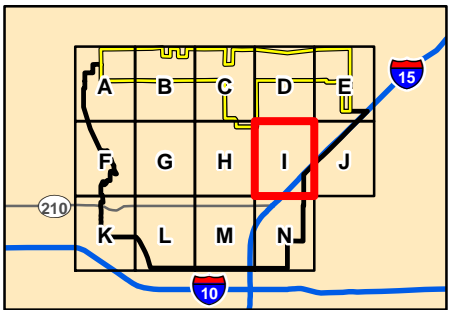


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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types

Rancho Cucamonga General Plan Update

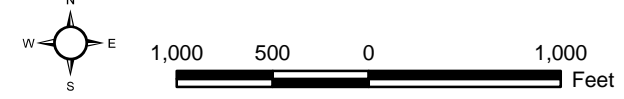
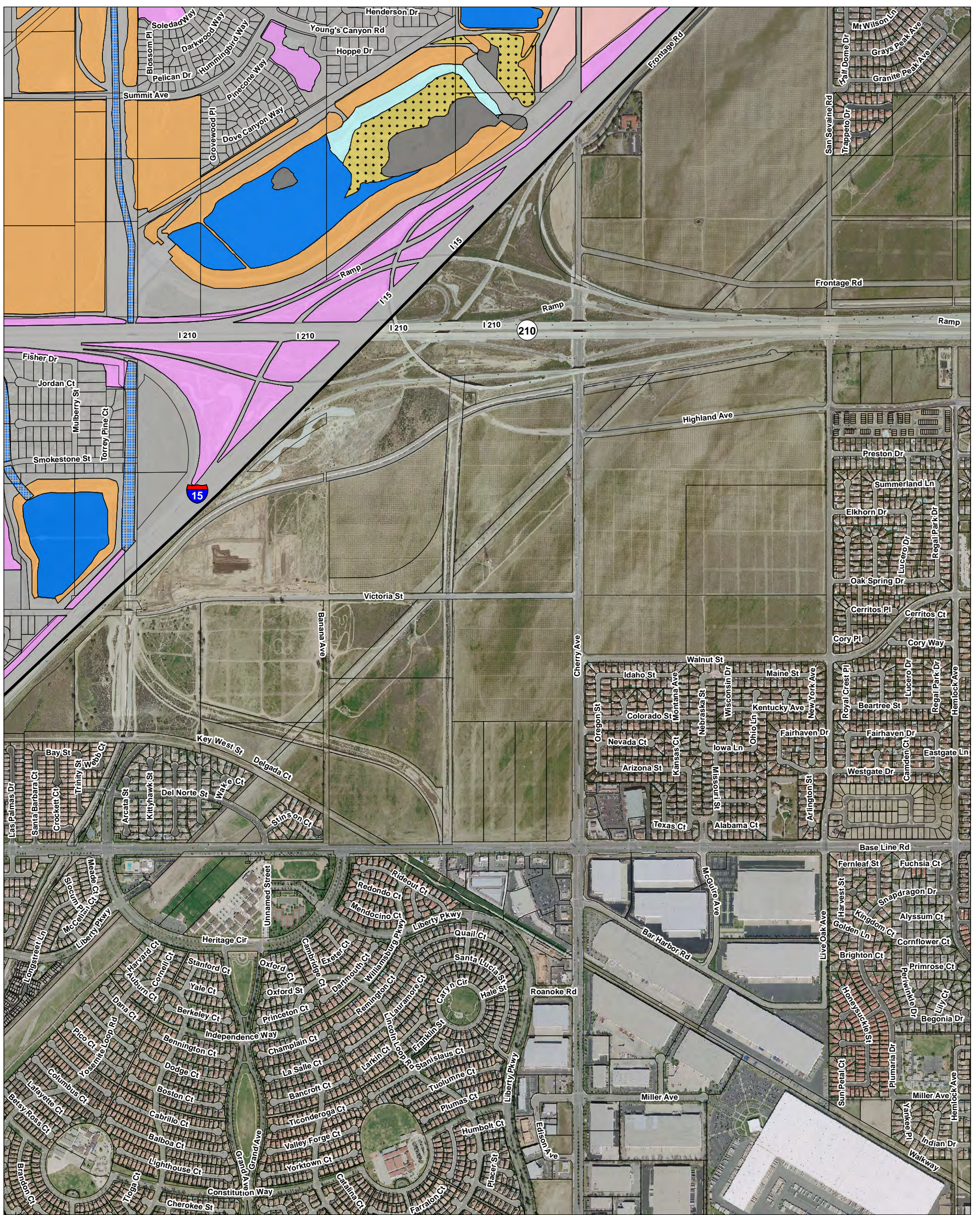


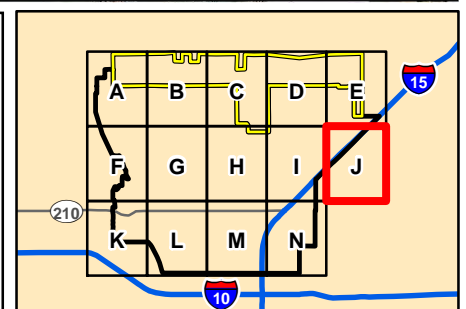
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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

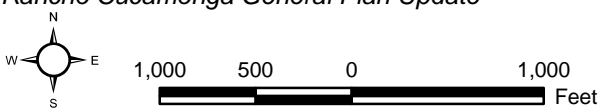
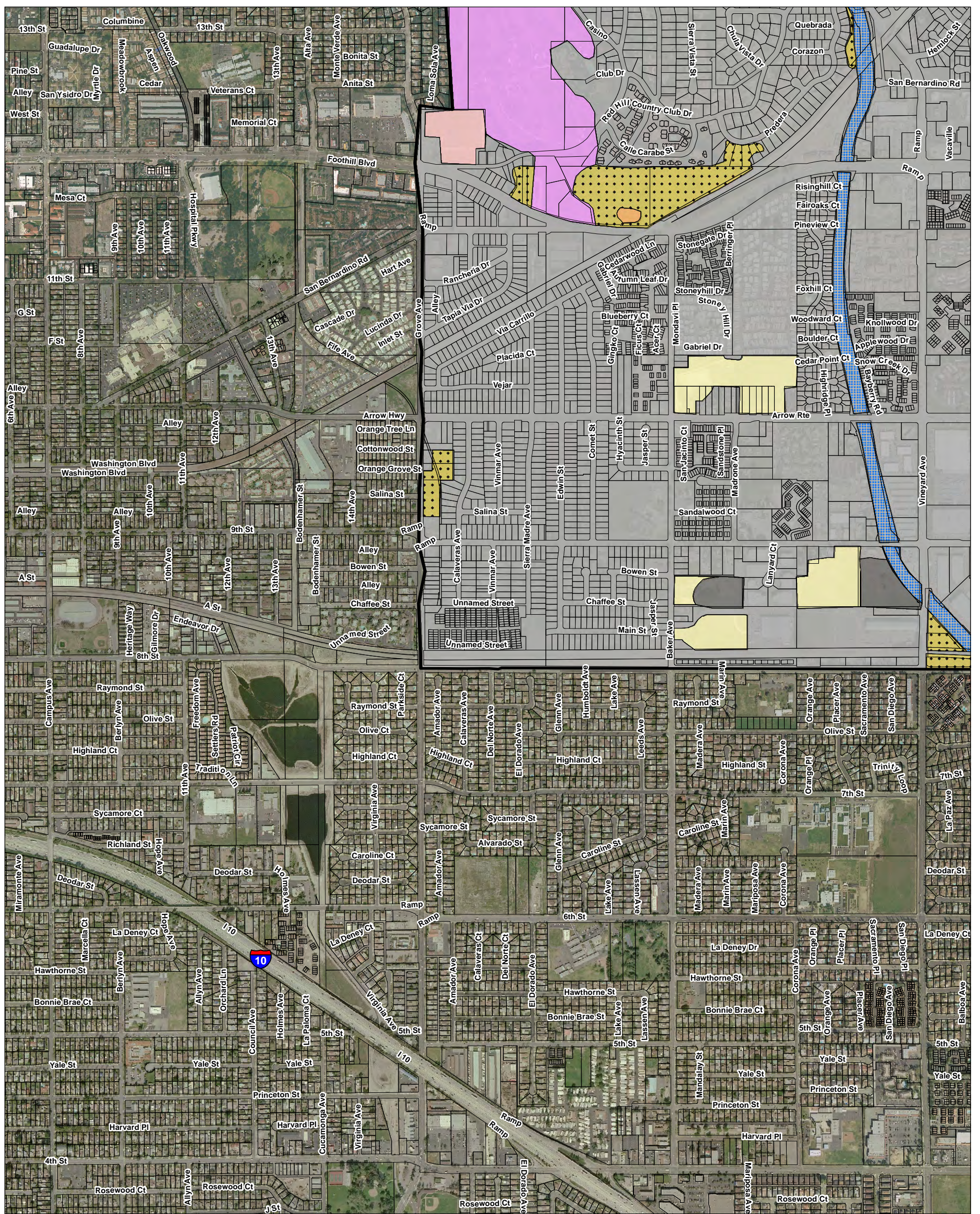
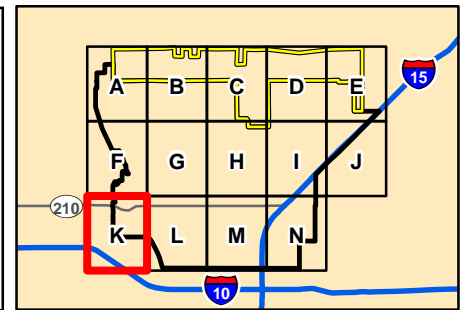


Exhibit 4.4-1J





City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

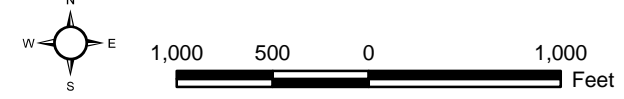
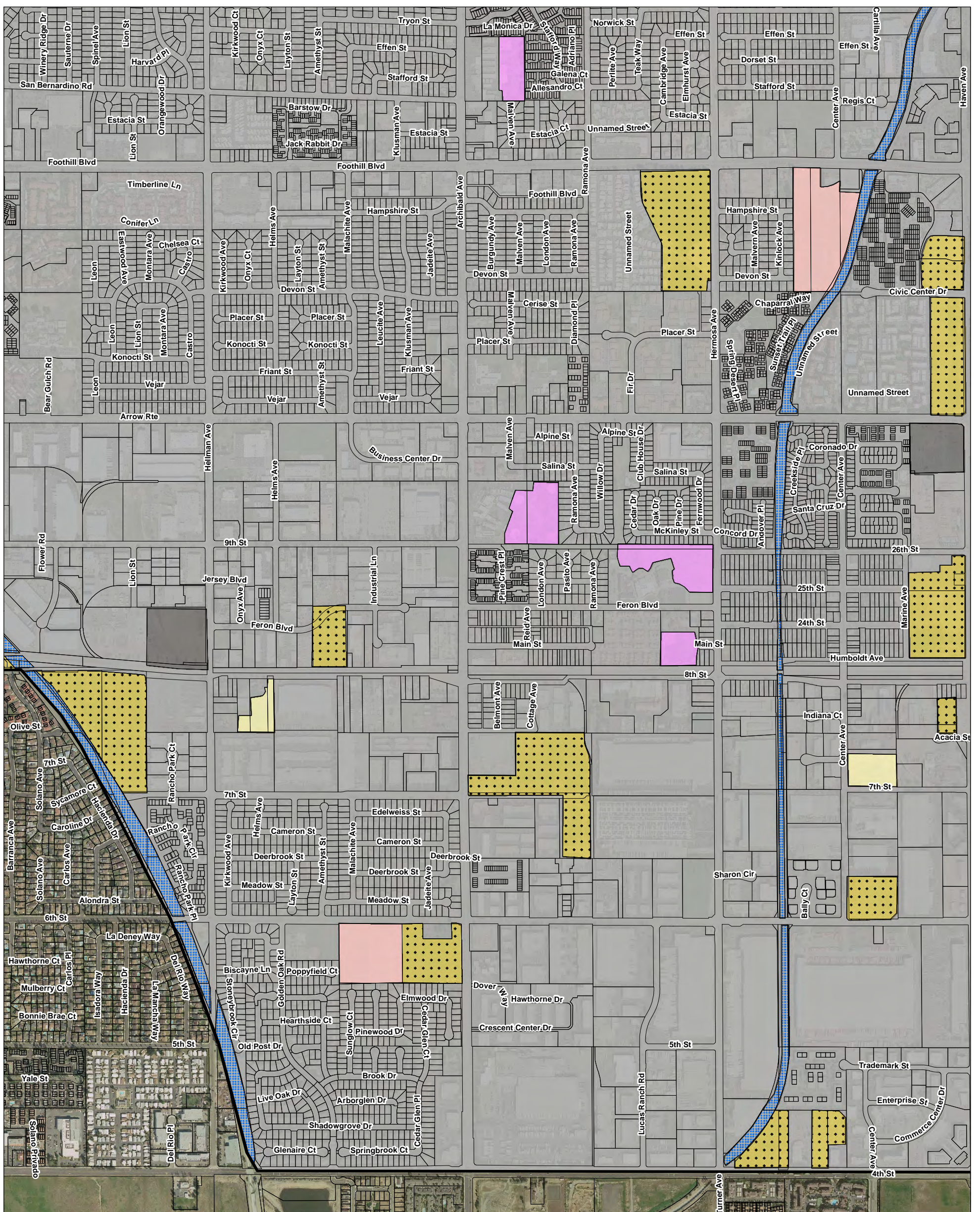


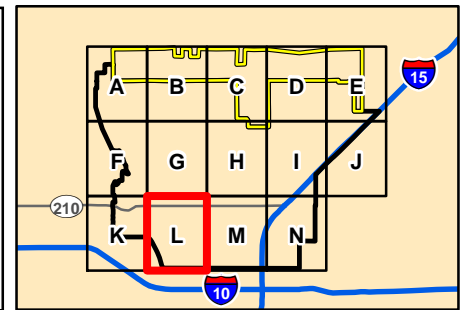
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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types

Rancho Cucamonga General Plan Update

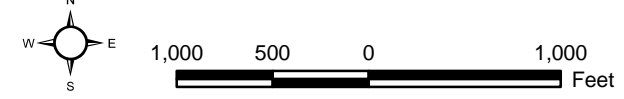
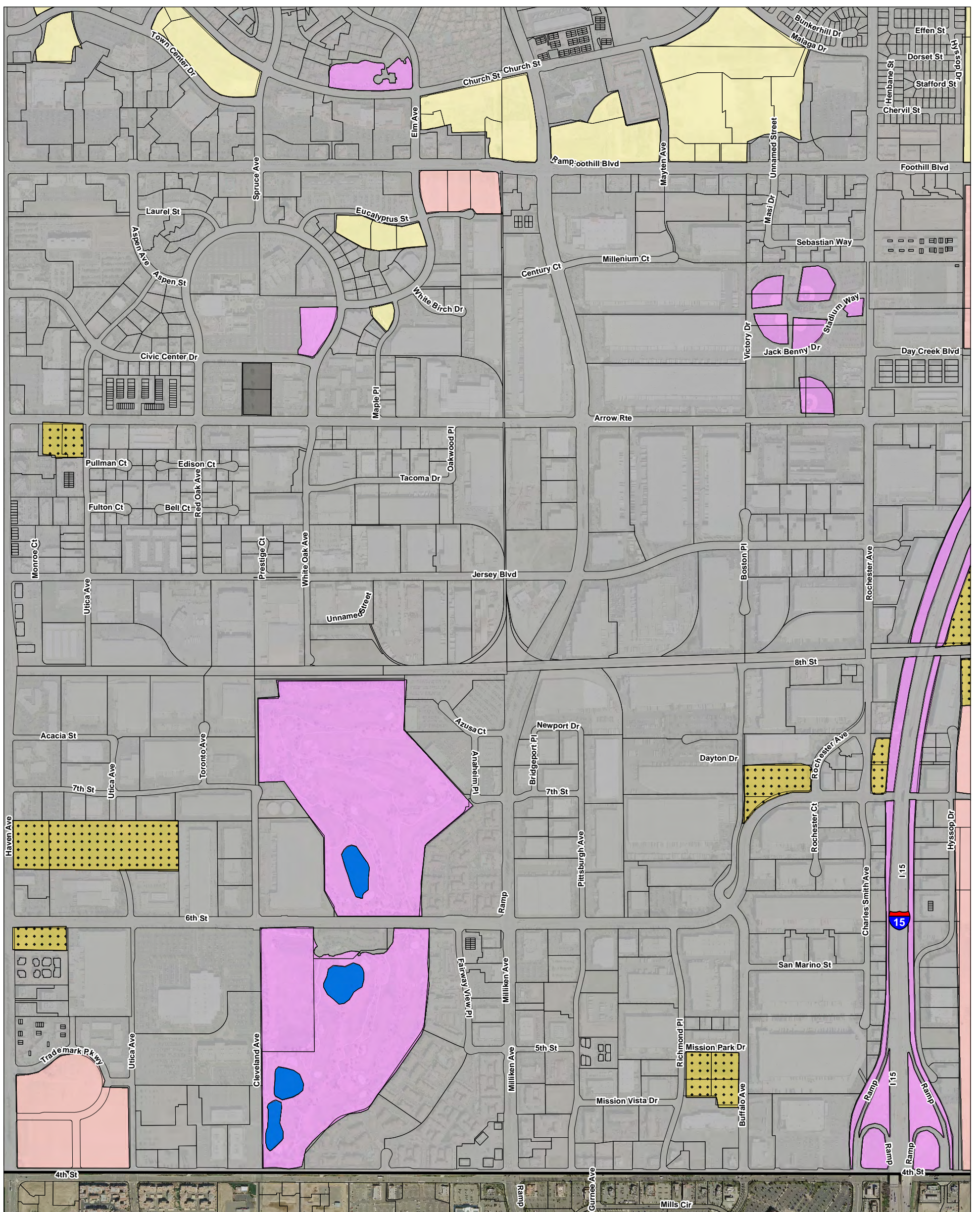


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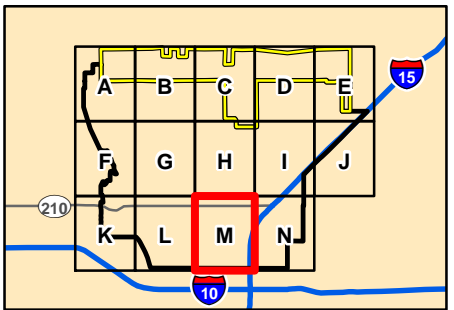


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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	

Source: BonTerra Consulting 2009



Vegetation Types
Rancho Cucamonga General Plan Update

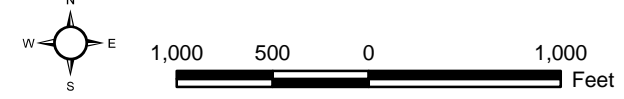
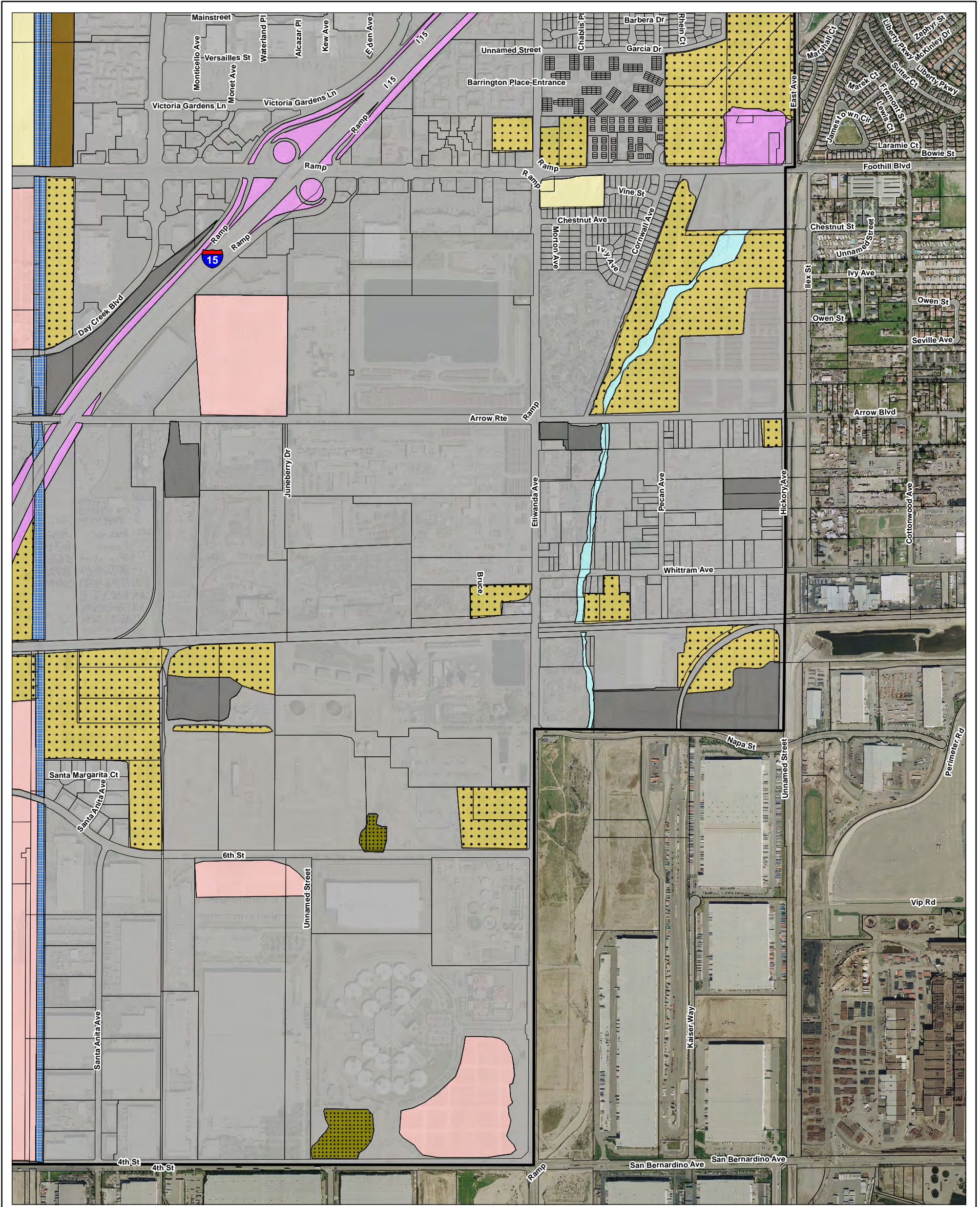


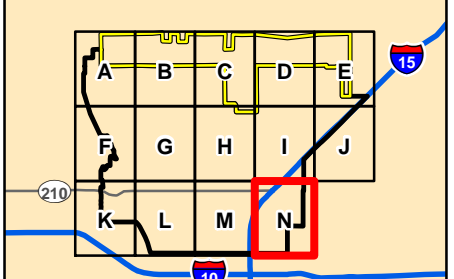
Exhibit 4.4-1M



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City Of Rancho Cucamonga	Red Willow Thicket	Grassland	Channel
Sphere of Influence	Chaparral	Annual Brome Grassland	Developed/Ornamental
Vegetation	Mixed Sage Scrub	Ruderal	Open Water
California Sycamore Woodland	Scale Broom Scrub	Ornamental	Not Mapped
Coast Live Oak Woodland	Alluvial Wash	Orchard - Agriculture	
Coast Live Oak - California Sycamore Woodland	Mule Fat Thicket	Disturbed	



Source: BonTerra Consulting 2009

Vegetation Types
Rancho Cucamonga General Plan Update

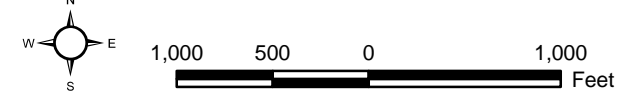


Exhibit 4.4-1N



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California Sycamore Woodland

California sycamore woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is dominated by western sycamore (*Platanus racemosa*). Scattered sycamores occur downstream in the various drainages, and are included in the alluvial wash vegetation type. Cucamonga, Deer, Day, and Etiwanda Creeks were previously documented as containing southern sycamore-alder riparian woodland with a variety of species, including white alder (*Alnus rhombifolia*), big-leaf maple (*Acer macrophyllum*), canyon live oak (*Quercus chrysolepis*), California bay laurel (*Umbellularia californica*), western sycamore, velvet ash (*Fraxinus velutina*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Fremont cottonwood (*Populus fremontii*), and black willow (*Salix gooddingii*) (Rancho Cucamonga 2001c).

Coast Live Oak Woodland

Coast live oak woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is dominated by coast live oak (*Quercus agrifolia*).

Coast Live Oak – California Sycamore Woodland

Coast live oak – California sycamore woodland occurs along the canyon bottoms in the northern portion of the proposed General Plan Update Study Area, typically in the City's SOI. This vegetation type is co-dominated by coast live oak and western sycamore. The understory of this vegetation type includes toyon (*Heteromeles arbutifolia*), red willow (*Salix laevigata*), and mule fat (*Baccharis salicifolia*).

Red Willow Thicket

Red willow thicket occurs in some canyon bottoms and isolated patches, typically in the City's SOI. This vegetation type is dominated by red willow. Other species present in these areas include mule fat, with some California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*).

A patch of willows at the western edge of the City extends along the edge of Cucamonga Creek. This area also contains mule fat, cattails (*Typha* sp.), and scattered laurel sumac (*Malosma laurina*).

A small patch of willow occurs near the northeastern corner of the City's SOI between Henderson and Morse canyons. Rushes (*Juncus* sp.), deergrass (*Muhlenbergia rigens*), western ragweed (*Ambrosia psilostachya*), and nightshade (*Solanum* sp.) are also present in this area. Previous documentation identifies an area dominated by sedges and rushes (coastal and valley freshwater marsh) at the confluence of Day Creek and East Etiwanda Canyon (MBA 2001). This freshwater marsh or peat bog is extremely sensitive to disturbance. Several special status plant species have been reported from this area: Nevin's barberry (*Berberis nevinii*), many-stemmed dudleya (*Dudleya multicaulis*), Hall's monardella (*Monardella macrantha* ssp. *hallii*), Pringle's monardella (*Monardella pringlei*)⁷, slender-horned spineflower (*Dodecahema leptoceras*), and San Gabriel bedstraw (*Galium grande*) (Rancho Cucamonga 2001c).

⁷ Pringle's monardella is currently considered extinct in California (CNPS List 1A) (CNPS 2009).

Chaparral

Chaparral occurs in scattered patches in the City's SOI. These areas contain shrubs that are larger than those of the mixed sage scrub that surrounds this vegetation type. These areas were inaccessible and the only species positively identified is toyon. Some areas that are currently mapped as mixed sage scrub appear to have contained chaparral species prior to a burn. Chaparral species previously identified in the proposed General Plan Update Study Area include manzanita (*Arctostaphylos* sp.), Nuttall's scrub oak (*Quercus dumosa*), ceanothus (*Ceanothus* sp.), holly-leaved cherry (*Prunus ilicifolia*), and Our Lord's candle (*Yucca whipplei*) (Rancho Cucamonga 2001c).

Mixed Sage Scrub

Mixed sage scrub occurs throughout the foothills of the proposed General Plan Update Study Area. Outside the alluvial areas, the majority of the City's SOI contain this vegetation type. Remnant patches of mixed sage scrub also occur within the City boundary. The dominant species in this vegetation type are California sagebrush, California buckwheat, deerweed (*Lotus scoparius*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), and thick-leaf yerba santa (*Eriodictyon crassifolium*). The shrub density, species composition, and species percent coverage varies by patch. Other species present, but not dominant, in these areas include telegraph weed (*Heterotheca grandiflora*), California aster (*Lessingia filaginifolia*), and brittlebush (*Encelia farinosa*). The amount of non-native vegetation also varies by patch. Some areas contain virtually no non-native species while other areas, particularly isolated patches, contain a large portion of species such as black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), common horehound (*Marrubium vulgare*), and bromes (*Bromus* spp.).

Scale Broom Scrub

Scale broom scrub occurs in the alluvial fans of the major creeks that drain the surrounding foothills. Remnant patches of this vegetation type are also present within areas of development. The substrate is sandy with a large number of cobbles and boulders. Scale broom (*Lepidospartum squamatum*) is diagnostically present at greater than one percent coverage in this vegetation type. In addition to scale broom, this vegetation type is co-dominated by a variety of species including California buckwheat, Our Lord's candle, and mountain mahogany (*Cercocarpus betuloides*). The amount of scale broom varies. Other species observed throughout this vegetation type include mule fat, deerweed, white sage, laurel sumac, and western sunflower (*Helianthus annuus*). Individual western sycamore trees are scattered in this vegetation type.

Some portions of this vegetation type are disturbed. While the northern portions of the alluvial fan are densely vegetated, other areas contain less cover and more non-native species such as black mustard and tocalote. The scale broom scrub present around the San Sevaine Basin appears to be revegetated. The vegetation at the bottom of the flood-control basin is mostly washed out. Shrubs are present in greater density on the berms.

Alluvial Wash

Alluvial wash consists of the stream courses of the various creeks in the proposed General Plan Update Study Area. These areas are either unvegetated or contain alluvial fan sage scrub species at a lower density than that vegetation type. Flowing water is present in some washes. The substrate of alluvial washes is sandy with numerous cobbles and boulders.

Mulefat Thickets

Mulefat thickets occur in remnant patches in the proposed General Plan Update Study Area. These areas are dominated by dense areas of mulefat.

Grassland

Grasslands occur in patches in the foothills of the City's SOI. These areas contain few scattered shrubs. The species composition of some patches was not determined due to their isolation. However, they are expected to contain a mix of native and non-native grasses and forbs such as needlegrass (*Nassella* sp.), bromes, and black mustard. One patch of grassland contained over ten percent needlegrass.

Annual Brome Grassland

Annual brome grassland is mapped throughout the proposed General Plan Update Study Area. These areas are dominated by non-native species (e.g., *Bromus* spp.). The density of non-native grasses varies by parcel. Some of these areas appear to have been unvegetated prior to recent rains.

Ruderal

Ruderal vegetation is mapped throughout the proposed General Plan Update Study Area. These areas contain a variety of weedy species such as black mustard, Russian thistle (*Salsola tragus*), and tocalote. Some scattered scrub species occur in some ruderal areas. The density of ruderal species varies by parcel.

Ornamental

Ornamental vegetation occurs throughout the proposed General Plan Update Study Area. This includes recreational areas (e.g., golf courses, parks, sports fields) and landscaping adjacent to the major freeways. Turf grass is a large component of the landscaping associated with the recreational areas. These areas also contain non-native trees such as gum (*eucalyptus* spp.), pine (*Pinus* spp.), or Peruvian pepper (*Schinus molle*). The vegetation adjacent to the freeways contains sage scrub species in some areas, with additional plantings of non-native species like wattle (*Acacia* sp.), Peruvian pepper, and hottentot fig (*Carpobrotus edulis*).

Orchard – Agriculture

Orchard – agriculture occurs in isolated patches throughout the proposed General Plan Update Study Area. Most of these areas are fallow grape vineyards. These areas contain a large amount of non-native species such as black mustard. This vegetation category also includes strawberry fields, citrus groves, and a tree farm.

Disturbed

Disturbed areas occur throughout the proposed General Plan Update Study Area. They consist of exposed soil with little or no vegetation. Some of these areas have been subject to grading or other earth disturbance measures.

Channel

Channels occur throughout the proposed General Plan Update Study Area. These are concrete lined and trapezoidal or vertical walled. Open water occurs in some channels while others are dry. The amount of open water present in these channels was too small to be mapped as a separate mapping unit.

Developed/Ornamental

The majority of the proposed General Plan Update Study Area is mapped as developed/ornamental. These areas consist of commercial, industrial, and residential structures and associated landscaping. Paved roads are also included in this mapping unit. Vegetation in these areas is varied and dominated by non-native, ornamental species including Peruvian pepper, pine, gum, flowering plum (*Prunus cerasifera*), and African fountain grass (*Pennisetum setaceum*).

Open Water

Open water occurs in various basins in the proposed General Plan Update Study Area. Golf course water features were also included in this mapping unit. Flowing water, while present in some creeks and channels in the proposed General Plan Update Study Area, was not mapped separately due to the relatively small area of cover.

Not Mapped

Portions of the proposed General Plan Update Study Area were not mapped. These areas occur in the foothills of the City's SOI. Unmapped areas were inaccessible at the time of the survey and not visible via binoculars from public roads. Mixed sage scrub, chaparral, grassland, or riparian woodland is expected to occur in these areas; however, this has not been confirmed.

Wildlife Habitat

A representative list of wildlife species observed during vegetation mapping, and species noted in previous studies, are listed in Appendix C. The majority of the proposed General Plan Update Study Area is currently developed. These areas contain little natural open space and would therefore provide limited habitat for wildlife species. Wildlife species may use the remnant patches of native scrub vegetation and ornamental landscaped areas such as parks and golf courses. The northern portion of the proposed General Plan Update Study Area contains large, contiguous open space that provides high quality habitat for numerous wildlife species.

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter, and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types depending on factors such as amount of vegetation cover, elevation, and slope aspect. One amphibian species was observed in the proposed General Plan Update Study Area: the Pacific treefrog (*Pseudacris [Hyla] regilla*). Other amphibian species previously reported from the Study Area include western toad (*Bufo boreas*) and California treefrog (*Pseudacris [Hyla] cadaverina*) (PCR 2008).

Reptilian diversity and abundance typically varies with vegetation type and character. Many species prefer only one or two vegetation types; however, most species will forage in a variety of habitats. Most reptile species that occur in open areas use rodent burrows for cover, protection from predators, and refuge during extreme weather conditions. Common reptile species observed in the proposed General Plan Update Study Area include western fence lizard (*Sceloporus occidentalis*) and side-blotched lizard (*Uta stansburiana*). Other common reptile species expected to occur include southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), and common kingsnake (*Lampropeltis getula*).

A variety of bird species are expected to be residents of the proposed General Plan Update Study Area and to use the habitats throughout the year. Other species are present only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur during the winter season and will then migrate north in the spring to breed during the summer.

Although the same individuals may not be present year-round, the following bird species were observed during the surveys and can be considered resident: mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), bushtit (*Psaltriparus minimus*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*).

Since general wildlife surveys were conducted in winter 2009, summer-only residents were not observed. Summer residents that may nest in the proposed General Plan Update Study Area include black-chinned hummingbird (*Archilochus alexandri*), Pacific-slope flycatcher (*Empidonax difficilis*), ash-throated flycatcher (*Myiarchus cinerascens*), Cassin's kingbird (*Tryannus vociferans*), black-headed grosbeak (*Pheucticus melanocephalus*), blue grosbeak (*Passerina caerulea*), hooded oriole (*Icterus cucullatus*), and Bullock's oriole (*Icterus bullockii*).

Wintering species observed during the surveys include Say's phoebe (*Sayornis saya*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), yellow-rumped warbler (*Dendroica coronata*), and white-crowned sparrow.

Raptor species observed foraging in the proposed General Plan Update Study Area include northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). Owls expected to occur include great horned owl (*Bubo virginianus*) and barn owl (*Tyto alba*).

Mammal species observed or detected in the proposed General Plan Update Study Area include Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), common raccoon (*Procyon lotor*), and mule deer (*Odocoileus hemionus*). Other common mammal species expected to occur include bobcat (*Lynx rufus*) and striped skunk (*Mephitis mephitis*).

Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, transitions in vegetation, or human disturbance. This is exacerbated by fragmentation of open space by urbanization, which creates isolated "islands" of wildlife habitat. In the absence of linkages that allow movement between areas of suitable habitat, various studies have

concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat because they prohibit the immigration of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between areas of remaining habitat, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or local species extirpation; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover). A number of terms such as “wildlife corridor”, “travel route”, “habitat linkage”, and “wildlife crossing” have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

- **Travel route.** A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover for wildlife moving between habitat areas and provides a relatively direct link between target habitat areas.
- **Wildlife corridor.** A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate wildlife movement while in the corridor. Larger, landscape-level corridors, often referred to as “habitat or landscape linkages”, can provide both transitory and resident habitat for a variety of species.
- **Wildlife crossing.** A small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor and may impede wildlife movement and increase the risk of predation.

It is important to note that wildlife corridors, as defined above, may not yet exist in a large open space area where there are few or no man-made or naturally occurring physical constraints to wildlife movement. Given an open space area that is both large enough to maintain viable populations of species and to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these “local” routes while searching for food, water, shelter, and mates and will not need to cross into other large open space areas. Based on their size, location, vegetative composition and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source

areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles (such as roads and highways), the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they (1) provide adequate space, cover, food, and water and (2) do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Ideally, a corridor should encompass a heterogeneous mix of habitats to accommodate the ecological requirements of the variety of species in any particular region. Most species typically prefer an adequate amount of vegetation cover during movement periods that serve as both a food source as well as protection from weather and potential predators. Drainages, riparian areas, and canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. For some species, habitat linkages and movement corridors should be able to support animals for a sustained period of time, not just for travel. Smaller or less mobile animals (such as rodents and reptiles) may require long periods to traverse a corridor, so the corridor must contain adequate food and cover for survival.

The majority of the proposed General Plan Update Study Area is currently developed. These areas contain little natural open space and would therefore not provide wildlife movement corridors. However, the northern portion of the proposed General Plan Update Study Area contains large, contiguous open space areas. Development within these areas could result in habitat fragmentation. This could inhibit wildlife movement, confining it to the remaining corridors of natural habitat between the areas of development.

A statewide interagency workshop was conducted in 2000 to delineate habitat linkages critical for preserving the State's biodiversity. The workshop developed a Linkage Design with the following goals: (1) to provide live-in and move-through habitat for multiple species; (2) to support metapopulations of smaller species; (3) to ensure availability of key resources; (4) to buffer against edge effects; (5) to reduce contaminants in streams; (6) to allow natural processes to operate; and (7) to allow species and natural communities to respond to climatic changes. This workshop identified 69 linkages within the South Coast Ecoregion. The San Gabriel-San Bernardino Linkage was one of 15 landscape linkages identified as crucial to maintaining ecological and evolutionary processes among large blocks of protected habitat within the South Coast Ecoregion (Penrod et al. 2004). This linkage occurs at the San Gabriel and San Bernardino Mountains divide, which includes the mountains and foothills north of and within the proposed General Plan Update Study Area. The marked elevational gradient and transition from cismontane scrub and woodland in the south to transmontane Mojave Desert in the north result in a diversity of natural communities (Penrod et al. 2004).

A group of 24 focal species that are sensitive to habitat loss and fragmentation in the area were identified. Five of these species (i.e., mountain lion, American badger, Nelson's bighorn sheep, mule deer, and Pacific kangaroo rat) were used in a landscape permeability analysis to model the relative cost for a species to move between protected core habitat or population areas. These were combined to generate a Least Cost Union (i.e., the union of the top one percent of the least cost corridors⁸ for all five species). The final Linkage Design resulting from the Least Cost Union was expanded to accommodate a species' particular requirements if it was omitted in the Least Cost Union.

⁸ "Least Cost Corridor" is defined as the best potential route for a species.

The final Linkage Design covers approximately 129,901 acres and has three roughly parallel routes to accommodate diverse species and ecosystem functions. The central branch is relatively short and largely in public ownership, but the northern and southern branches are roughly 24 miles long and include substantial private lands (Penrod et al. 2004). The northern branch provides a high desert connection dominated by xeric chaparral communities, with patches of desert scrub, juniper and Joshua tree woodlands, grassland, and riparian habitats. The central branch links a series of higher elevation forest and shrubland habitats. The southern branch encompasses coastal and alluvial fan scrub habitats and includes portions of Cucamonga, Deer, Day, Etiwanda, Morse, and San Sevaine Creeks. Natural vegetation comprises most of the Linkage Design, but urban and agricultural development covers approximately 1.8 percent of the area. As of 2004, approximately 66 percent of the Linkage Design had some level of conservation protection.

A portion of the City is within the Linkage Design area. The City's Open Space Plan includes five conservation areas established to protect alluvial fan sage scrub habitat within the proposed General Plan Update Study Area.

Special Status Biological Resources

Special Status Vegetation Types

In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation types that are considered special status by State and Federal resource agencies, academic institutions, and various conservation groups (such as the CNPS). Determination of the sensitivity level is based on the Nature Conservancy Heritage Program Status Ranks, which rank both species and vegetation types on a global and statewide basis according to the number and size of remaining occurrences and recognized threats (e.g., proposed developments, habitat degradation, non-native species invasion). Multiple special status vegetation types are reported in the vicinity of the proposed General Plan Update Study Area: California walnut woodland, canyon live oak ravine forest, coastal and valley freshwater marsh, scale broom scrub, Southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, and southern sycamore alder riparian woodland (CDFG 2009). Of these, canyon live oak ravine forest, Southern California arroyo chub/Santa Ana sucker stream, and southern coast live oak riparian forest have not been reported within the proposed General Plan Update Study Area.

California Walnut Woodland

California walnut woodland was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has previously been reported in the City's SOI (Rancho Cucamonga 2001c). Individual Southern California black walnut trees were observed during the 2009 survey. In addition to being considered a sensitive vegetation type by the CNDDDB, the County of San Bernardino's and the City's tree preservation ordinances protect certain native trees, including Southern California black walnut trees.

Coastal and Valley Freshwater Marsh

Coastal and valley freshwater marsh was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has previously been reported in the City's SOI (Rancho Cucamonga 2001c) and is within the preserve area.

Riversidian Alluvial Fan Sage Scrub

The proposed General Plan Update Study Area contains a total of 3,778 acres of scale broom scrub. This is equivalent to the Riversidian alluvial fan sage scrub in Holland [1986]. In addition to being considered a sensitive habitat by the CNDDDB, the County of San Bernardino's tree preservation ordinance protects vegetation within 200 feet of a stream.

Southern Sycamore Alder Riparian Woodland

Southern sycamore alder riparian woodland was not observed during general vegetation mapping of the proposed General Plan Update Study Area. However, this vegetation type has been reported in the City's SOI (Rancho Cucamonga 2001c). In addition to being considered a sensitive vegetation type by the CNDDDB, County of San Bernardino's tree preservation ordinance protects vegetation within 200 feet of a stream.

Other Special Status Vegetation Types

Although California sycamore woodland, coast live oak woodland, and coast live oak – California sycamore woodland are not considered sensitive by the CNDDDB, the County of San Bernardino's and City of Rancho Cucamonga's tree preservation ordinances regulate the removal of western sycamore and oak trees. Oak woodlands are also protected by State law (SB 1334-California Oak Woodland Law). The proposed General Plan Update Study Area contains a total of approximately 20 acres of California sycamore woodland, 14 acres of coast live oak woodland, and 40 acres of coast live oak – California sycamore woodland, with additional western sycamore and oak trees potentially in other vegetation types.

Red willow thickets are not considered sensitive by the CNDDDB; however, red willows meeting the size criteria of the County and City tree preservation ordinances would be protected. Red willow thickets and mulefat thickets are protected as riparian plants, if within 200 feet of a stream in unincorporated San Bernardino County. The proposed General Plan Update Study Area contains a total of 23 acres of red willow thickets and 8 acres of mulefat thickets.

Although not considered sensitive by the CNDDDB, mixed sage scrub is declining in the region and may support special status plant and wildlife species. The proposed General Plan Update Study Area contains 3,165 acres of mixed sage scrub.

Although not reported in the vicinity of the proposed General Plan Update Study Area by the CNDDDB, the CNDDDB considers various native grasslands to be sensitive. The grasslands mapped in the proposed General Plan Update Study Area may contain native species in high enough abundance to be considered special status. The Study Area contains a total of 70 acres of grassland. The annual brome grassland mapped in the Study Area would not be considered special status.

Jurisdictional Resources

Numerous named and unnamed blueline streams⁹ are identified on the USGS quadrangles in the proposed General Plan Update Study Area. The majority of these streams drain from the mountains located to the north of the City. These streams include, but are not limited to, Cucamonga Creek, Deer Creek, Day Creek, and East Etiwanda Creek. Within the City, many drainages are channelized. These areas are potentially under the jurisdiction of the USACE, the

⁹ Stream courses shown on the USGS topographic quadrangle.

RWQCB, and the CDFG. In addition, the County of San Bernardino’s tree preservation ordinance protects vegetation within 200 feet of a stream.

Special Status Plant Species

Many special status plant species are known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti USGS 7.5-minute quadrangles). These species are summarized in Table 4.4-2. The species were either “observed” within the proposed General Plan Update Study Area, “reported” by the CNDDB and/or CNPS in the vicinity of the proposed General Plan Update Study Area, or “included” in previous analyses for specific projects.

**TABLE 4.4-2
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE VICINITY
OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status			Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG	CNPS		
<i>Ambrosia monogyra</i> singlewhorl burrobrush	–	–	2.2	Historically reported near Rialto (1947 and 1926 records; CDFG 2009)	–
<i>Berberis nevini</i> Nevin’s barberry	FE	SE	1B.1	Reported from Cobal Canyon, less than 5 miles east of the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2008a)
<i>California macrophylla</i> round-leaved filaree	–	–	1B.1	Historically reported from Claremont (1921 record; CDFG 2009)	–
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa lily	–	–	1B.2	Reported from Evey Canyon, less than 4 miles east of the City (CDFG 2009)	–
<i>Calochortus plummerae</i> Plummer’s mariposa lily	–	–	1B.2	Observed at multiple locations in the City (TKC 2003; PCR 2008; CDFG 2009)	–
<i>Centromadia [Hemizonia]</i> <i>pungens</i> ssp. <i>laevis</i> smooth tarplant	–	–	1B.1	Reported by CNPS (2009).	–
<i>Chorizanthe leptotheca</i> peninsular spineflower	–	–	4.2	Included in a previous EIR as potentially occurring (TKC 2003)	–
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry’s spineflower	–	–	1B.1	Observed at multiple locations in the City (CDFG 2009)	–
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	–	–	1B.2	Reported in the vicinity of Devore (CDFG 2009)	–
<i>Cladium californicum</i> California sawgrass	–	–	2.2	Historically observed in the western portion of the City (1918 record; CDFG 2009)	–

TABLE 4.4-2 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE VICINITY
OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status			Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG	CNPS		
<i>Claytonia lanceolata</i> var. <i>peirsonii</i> Peirson's spring beauty	-	-	1B.1	Reported near Bighorn Peak and Timber Mountain, less than 5 miles north of the SOI (CDFG 2009).	-
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE	SE	1B.1	Historically reported from the vicinity of Upland (1905 record; CDFG 2009)	No Critical Habitat has been published.
<i>Dudleya multicaulis</i> many-stemmed dudleya	-	-	1B.2	Reported north of Claremont (CDFG 2009)	-
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	FE	SE	1B.1	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	No Critical Habitat has been published.
<i>Eriogonum evanidum</i> vanishing wild buckwheat	-	-	1B.1	Reported by CNPS (2009).	-
<i>Eriogonum microthecum</i> var. <i>johnstonii</i> Johnston's buckwheat	-	-	1B.3	Reported near Cucamonga Peak, less than 4 miles north of the SOI (CDFG 2009)	-
<i>Galium grande</i> San Gabriel bedstraw	-	-	1B.2	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Horkelia cuneata</i> ssp. <i>puberula</i> mesa horkelia	-	-	1B.1	Observed at multiple locations in the City (CDFG 2009)	-
<i>Juglans californica</i> Southern California black walnut	-	-	4.2	Observed during 2009 survey.	-
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	-	-	1B.2	Historically reported in the vicinity of Chino (1936 record; CDFG 2009)	-
<i>Lilium parryi</i> lemon lily	-	-	1B.2	Reported from region; location information is sensitive (CDFG 2009)	-
<i>Linanthus concinnus</i> San Gabriel linanthus	-	-	1B.2	Historically reported from Icehouse Canyon north of the SOI (1917 record; CDFG 2009)	-
<i>Lycium parishii</i> Parish's desert-thorn	-	-	2.3	Historically reported north of San Bernardino (1885 record; CDFG 2009)	-
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	-	-	1B.3	Reported near Sunset Peak, less than 5 miles northwest of the City (CDFG 2009)	-
<i>Mucronea californica</i> California spineflower	-	-	4.2	Included in a previous EIR as potentially occurring (TKC 2003)	-

TABLE 4.4-2 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE VICINITY
OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status			Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG	CNPS		
<i>Muhlenbergia californica</i> California muhly	–	–	4.3	Historically observed from Red Hill (1916 record; CDFG 2009)	–
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	–	–	1B.1	Historically observed from Red Hill (1917 record; CDFG 2009)	–
<i>Oreonana vestita</i> woolly mountain-parsley	–	–	1B.3	Reported from various peaks within 5 miles of the SOI (CDFG 2009)	–
<i>Orobanche valida</i> ssp. <i>valida</i> Rock Creek broomrape	–	–	1B.2	Reported near Lookout Mountain, north of the sphere of influence (CDFG 2009)	–
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	–	–	2.2	Reported by CNPS (2009)	–
<i>Sidalcea neomexicana</i> salt spring checkerbloom	–	–	2.2	Historically reported from Claremont (1909 record; CDFG 2009)	–
<i>Streptanthus bernardinus</i> Laguna Mountains jewel-flower	–	–	4.3	Reported near Lytle Creek, northeast of the Plan Area (CDFG 2009).	–
<i>Symphyotrichum defoliatum</i> San Bernardino aster	–	–	1B.2	Historically observed in Red Hill (1916 record; CDFG 2009)	–
<i>Symphyotrichum greatae</i> Greata's aster	–	–	1B.3	Historically reported from Evey Canyon, less than 4 miles east of the City (1917 record; CDFG 2009)	–
LEGEND:					
Federal (USFWS)		State (CDFG)			
FE Endangered		SE Endangered			
California Native Plant Society (CNPS) List Categories					
List 1A Plants Presumed Extinct in California					
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere					
List 2 Plants Rare, Threatened, or Endangered in California But More Common Elsewhere					
List 3 Plants About Which We Need More Information – A Review List					
List 4 Plants of Limited Distribution – A Watch List					
California Native Plant Society (CNPS) Threat Code Extensions					
None Plants lacking any threat information					
.1 Seriously threatened in California (high degree/immediacy of threat)					
.2 Fairly threatened in California (moderate degree/immediacy of threat)					
.3 Not very threatened in California (low degree/immediacy of threat or no current threats known)					
– Indicates information that is not applicable to the species.					

Special Status Wildlife Species

Many special status wildlife species are known to occur in the vicinity of the proposed General Plan Update Study Area (i.e., the Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti USGS 7.5-minute quadrangles). These species are summarized in Table 4.4-3. Note that these species are listed taxonomically. The species were either “observed” within the proposed General Plan Update Study Area, “reported” by the CNDDDB in the vicinity of the Study Area, included in previous analyses for specific projects, or are potentially present due to suitable habitat within the Study Area.

**TABLE 4.4-3
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
Invertebrates				
<i>Callophrys mossii hidakupa</i> San Gabriel Mountains elfin butterfly	–	SA	Reported near Stoddard Peak, less than three miles northwest of the SOI (CDFG 2009)	–
<i>Diplectrona californica</i> California diplectronan caddisfly	–	SA	Reported from Claremont (CDFG 2009)	–
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	FE	–	Reported from Fontana and Mira Loma (CDFG 2009)	No Critical Habitat has been published.
Fish				
<i>Gila orcuttii</i> arroyo chub	–	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (CDFG 2009)	–
<i>Rhinichthys osculus ssp. 3</i> Santa Ana speckled dace	–	SSC	Reported from Lytle Creek (Penrod et al. 2004)	–
<i>Catostomus santaanae</i> Santa Ana sucker	FT	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (CDFG 2009)	Not within final (USFWS 2005) or newly proposed (USFWS 2009) Critical Habitat.
Amphibians				
<i>Batrachoseps gabrieli</i> San Gabriel slender salamander	–	SA	Reported from multiple locations within 6 miles of the General Plan Area (CDFG 2009)	–
<i>Rana muscosa</i> Sierra Madre yellow-legged frog	FE	SSC	Reported from Day Canyon and historically from Cucamonga and East Etiwanda Canyons (1959 records) north of the Plan Area (CDFG 2009)	The upper reaches of Day Canyon, north of the SOI are located in Unit 1, Subunit E of the Final Critical habitat (USFWS 2006)

TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Rana aurora</i> red-legged frog	-	-	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Taricha torosa torosa</i> Coast Range newt	-	SSC	Reported from Live Oak and Cobal Canyons east of the General Plan Area (CDFG 2009)	-
Reptiles				
<i>Phrynosoma coronatum</i> [blainvillii] population coast [San Diego] horned lizard	-	SSC	Observed in the City near Etiwanda (CDFG 2009)	-
<i>Aspidoscelis</i> [Cnemidophorus] <i>hyperythra</i> orange-throated whiptail	-	SSC	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-
<i>Aspidoscelis</i> [Cnemidophorus] <i>tigris stejnegeri</i> coastal whiptail	-	SA	Reported from San Antonio Canyon (CDFG 2009)	-
<i>Anniella pulchra pulchra</i> silvery legless lizard	-	SSC	Reported from Claremont (CDFG 2009)	-
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	-	WL ^a	Observed during 2009 survey	-
<i>Accipiter striatus</i> sharp-shinned hawk	-	WL ^a	Observed in the City (TKC 2003)	-
<i>Aquila chrysaetos</i> golden eagle	-	WL, FP ^{a,b}	Observed in the City (LSA 2001; PCR 2008)	-
<i>Circus cyaneus</i> northern harrier	-	SSC ^a	Observed during 2009 survey	-
<i>Elanus leucurus</i> white-tailed kite	-	FP ^a	Observed in the City (PCR 2008)	-
<i>Haliaeetus leucocephalus</i> bald eagle	-	SE, FP ^{a,b}	Potentially Present	-
<i>Pandion haliaetus</i> osprey	-	WL ^a	Potentially Present	-
<i>Falco columbarius</i> merlin	-	WL ^b	Potentially Present	-
<i>Falco mexicanus</i> prairie falcon	-	WL ^a	Potentially Present	-
<i>Falco peregrinus anatum</i> American peregrine falcon	-	SE, FP ^a	Potentially Present	-
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FC	SE ^a	Historically reported from Chino (1931 record; CDFG 2009)	-
<i>Asio otus</i> long-eared owl	-	SSC ^a	Included in a previous EIR as potentially occurring (Rancho Cucamonga 2001c)	-

TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Athene cunicularia</i> burrowing owl	–	SSC ^c	Observed in multiple locations in the City (LSA 2001; CDFG 2009)	–
<i>Cypseloides niger</i> black swift	–	SSC ^a	Reported from Wolfskill Falls east of the Plan Area (CDFG 2009)	–
<i>Lanius ludovicianus</i> loggerhead shrike	–	SSC ^a	Observed during 2009 survey at multiple locations	–
<i>Poliophtila californica californica</i> coastal California gnatcatcher	FT	SSC	Observed in multiple locations in the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2007)
<i>Dendroica petechia</i> yellow warbler	–	SSC ^a	Observed in the City (PCR 2008)	–
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	–	WL	Observed in the City (TKC 2003)	–
<i>Amphispiza belli belli</i> Bell's sage sparrow	–	WL ^a	Observed in the City (LSA 2001)	–
<i>Agelaius tricolor</i> tricolored blackbird	–	SSC ^d	Reported from the San Bernardino Flood Control Basin (CDFG 2009)	–
Mammals				
<i>Antrozous pallidus</i> pallid bat	–	SSC	Historically reported from Ontario (1951 record; CDFG 2009)	–
<i>Lasiurus cinereus</i> hoary bat	–	SA	Historically reported 1.5 miles northwest of Claremont (1940 record; CDFG 2009)	–
<i>Lasiurus xanthinus</i> western yellow bat	–	SSC ^e	Observed in the western portion of the City (CDFG 2009)	–
<i>Eumops perotis californicus</i> western mastiff bat	–	SSC	Observed in 2 locations in the City (CDFG 2009)	–
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	–	SSC	Reported in the vicinity of San Bernardino (CDFG 2009)	–
<i>Nyctinomops macrotis</i> big free-tailed bat	–	SSC	Reported from Pomona (CDFG 2009)	–
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	–	SSC	Observed in Day Canyon (CDFG 2009)	–
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	–	SSC	Observed in multiple locations in the City (CDFG 2009)	–
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	–	SSC	Observed in multiple locations in the City (CDFG 2009)	–

**TABLE 4.4-3 (Continued)
SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE
VICINITY OF THE RANCHO CUCAMONGA PROPOSED GENERAL PLAN
UPDATE STUDY AREA**

Species	Status		Occurrence Information	Relationship of Plan Area to Critical Habitat
	USFWS	CDFG		
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE	SSC	Observed in multiple locations near the northeastern corner of the City (CDFG 2009)	Not in final Critical Habitat (USFWS 2008b)
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	–	SSC	Observed in the City (CDFG 2009)	–
<i>Ovis canadensis nelsoni</i> Nelson's bighorn sheep	–	SA	Reported near Lytle Creek and near Iron Mountain (CDFG 2009)	–
LEGEND:				
Federal (USFWS)		State (CDFG)		
FE	Endangered	SE	Endangered	
FT	Threatened	ST	Threatened	
FC	Candidate	SSC	Species of Special Concern	
		WL	Watch List	
		FP	Fully Protected	
^a Designation refers to nesting individuals ^b Designation refers to wintering individuals ^c Designation refers to burrow sites; wintering observations not considered special status for Orange County ^d Designation refers to nesting colony ^e Designation based on the draft updated mammalian species of special concern report – Indicates information that is not applicable to the species.				

4.4.3 THRESHOLDS OF SIGNIFICANCE

The criteria for determining significant impacts on biological resources were developed in accordance with the State CEQA Guidelines. Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect on the environment if "...the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species". An evaluation of whether an impact on biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish or result in the loss of an important biological resource or those that would obviously conflict with local, State, or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

The following significant criteria are derived from the State CEQA Guidelines. A project would result in a significant adverse impact related to biological resources if it would:

Threshold 4.3a: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;

- Threshold 4.3b:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;
- Threshold 4.3c:** Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Threshold 4.3d:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Threshold 4.3e:** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances; and/or
- Threshold 4.3f:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.4 GENERAL PLAN GOALS AND POLICIES

General Plan Goals and Policies

A number of policies in the draft Resource Conservation Element of the proposed General Plan Update address biological resource issues. Implementation of these policies would help reduce impacts to existing biological resources within the City and its SOI. Applicable goals and related policies are identified below in italics. Each policy is followed by an implementation action which identifies the programs and procedures that will be used to put General Plan goals and policies into action.

Policy RC-1.1: Preserve sensitive land resources that have significant native vegetation and/or habitat value.

Implementation Action: *Continue to consult with agencies and private organizations that have the land or other resources available to promote open space and habitat preservation and restoration.*

Policy RC-8.1: Preserve the integrity of riparian habitat areas, creek corridors, Riversidian Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that support biological resources.

Implementation Action: *Pursue actions that provide appropriate long-term protection of areas within the City's Sphere of Influence that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local environment.*

Policy RC-8.2: Consult with San Bernardino County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve.

Implementation Action: *Require development proposals that include riparian or water-related communities to prepare a site-specific investigation to define the extent*

and fragility of the riparian community, determine wetland permit requirements and propose measures to mitigate any impacts on the resources stemming from land disturbance or other site development.

Policy RC-8.3: Utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas.

Implementation Action: Continue working with the County of San Bernardino, California Department of Fish and Game, and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains. Continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub (AFSS) to create a preserve for use as part of a mitigation land bank.

Policy RC-8.4: Acquire and/or protect open space areas that provide strategic wildlife corridors and vital connectivity between habitat areas.

Implementation Action: Continue working with the County of San Bernardino, California Department of Fish and Game, and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains. Continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub (AFSS) to create a preserve for use as part of a mitigation land bank.

Policy LU-8.5: Protect natural resources and sensitive habitat areas, and avoid encroachment from new hillside development.

Implementation Action: Continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies with purview over natural resources and sensitive habitats.

4.4.5 STANDARD CONDITIONS OF APPROVAL

SC 4.4-1 Special status plant and wildlife species have the potential to occur within the proposed General Plan Update Study Area. Any CEQA project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City.

SC 4.4-2 Any project within the proposed General Plan Update Study Area that impacts a Federally listed species shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their

habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-3 Any project within the proposed General Plan Update Study Area that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the 2080 CEQA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed Mitigation Plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Game (CDFG), and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

SC 4.4-4 To avoid conflicts with Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a pre-construction survey (or possibly multiple surveys) by a qualified biologist are recommended prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the CDFG and the City.

SC 4.4-5 To avoid conflict with Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, the Standard Condition outlined above for the Migratory Bird Treaty

Act (SC 4.4-4) shall be implemented. The Migratory Bird Treaty Act mirrors the requirements for CDFG code relative to the protection of migratory birds and prohibits taking and possession of any migratory nongame bird, as designated in the Migratory Bird Treaty Act.

- SC 4.4-6** A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB approval requirements. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified Biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- SC 4.4-7** The Porter-Cologne Act and Sections 1600–1616 of the *California Fish and Game Code* protect “Waters of the State”. Agreements (Streambed Alteration Agreements) from the CDFG shall be required for impacts on areas within the CDFG jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFG resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFG requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFG, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- SC 4.4-8** The County of San Bernardino’s Code of Ordinances (Title 8, Division 8, Chapter 88.01 – Plant Protection and Management) provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. Prior to the removal of a protected tree or plant within the unincorporated SOI, a removal permit shall be obtained.
- SC 4.4-9** The City’s Tree Preservation Municipal Code (Title 19, Environmental Protection – Chapter 19.08) states that eucalyptus, palm, oak, sycamore, pine and other trees growing within the City are a natural aesthetic resource and are worthy of protection. Prior to removal of a Heritage Tree within the City limits, a Tree Removal Permit shall be obtained from the Planning Director and replacement trees may be required consistent with the City code.

4.4.6 ENVIRONMENTAL IMPACTS

Special Status Species

Threshold 4.4a: **Would the proposed General Plan Update have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS?**

The proposed General Plan Update Study Area contains habitat types that are known or have the potential to support several species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or the USFWS (See Tables 4.4-2 and 4.4-3). The majority of suitable habitat for special status species is located within the City's SOI. The SOI is primarily considered "Open Space" in the General Plan Update, which includes open space with 0.1 dwelling units per acre allowed and conservation areas and flood control/utility corridor with no dwelling units per acre allowed.

Implementation of the proposed General Plan Update could potentially result in impacts on special status plant and wildlife species if they occur on site. Potential impacts on these species shall be evaluated on a project-specific basis by identifying the habitats within the proposed General Plan Update Study Area and the species that are known to occupy these habitat types. Per SC 4.4-1, any CEQA project that involves the removal of habitat must consider if any special status species is potentially present on a project site and if the project impacts could be considered significant. If potential habitat is present, focused surveys shall be conducted to document the presence or absence of a species on the project site.

Special Status Plants

Several special status plant species are known to occur or have the potential to occur with the proposed General Plan Update Study Area, including those listed as Threatened, Endangered, or CNPS List 1 and List 2 species. Impacts on these species may be considered significant if a project's impacts would result in a substantial loss to the regional population of the special status plant species.

As required under Policy RC-1.1, the City will implement actions that preserve sensitive land resources with significant native vegetation and/or habitat value, which could offset impacts to special status resources. The City will continue to liaison with agencies and private organizations that have the land or other resources available to promote open space and habitat preservation and restoration.

Policy RC-8.1 also requires the City to implement actions that result in the preservation of the integrity of riparian habitat areas, creek corridors, Riverside Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that supports biological resources. The City shall pursue these actions that provide appropriate long-term protection of areas within the City's SOI that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local environment.

Under Policy RC-8.2, the City is required to consult with the County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve. The City shall continue to work with the County of San Bernardino to protect these sensitive biological resources.

Additionally, Policy RC-8.3 requires the City to utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas. The City shall continue to work with the County of San Bernardino, the CDFG, and the USFWS to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains that will become part of a larger Multiple Species Habitat Conservation Plan (MSHCP) for the County of San Bernardino. The City shall also continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub to create a preserve for use as part of a mitigation land bank.

Any project within the General Plan area that impacts a State or Federally listed Threatened or Endangered species shall be required to obtain take authorization through the CESA and/or FESA prior to project implementation (refer to SC 4.4-2 and SC 4.4-3). Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). In addition, special status plant species that are not listed as Threatened or Endangered shall also be evaluated to determine if the City considers project impacts to be significant. If impacts are found to be significant, appropriate mitigation would be required in coordination with the City.

General Habitat Loss and Wildlife Loss

Implementation of the proposed General Plan Update could result in the loss of native habitat that provides nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. In addition, implementation of the proposed General Plan Update could result in the loss of non-native habitats (non-native grassland, ruderal, ornamental, flood-control channel, and disturbed) that provide lower-quality wildlife habitat. However, these non-native habitats may provide limited nesting, foraging, roosting, and denning opportunities for some species.

Removing or altering habitats within the proposed General Plan Update Study Area would result in the loss of small mammals, reptiles, amphibians, and other slow-moving animals that live in an impact area. More mobile wildlife species that are now using proposed General Plan Update Study Area would be forced to move into the remaining areas of open space, which would consequently increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete.

Policy LU-8.5 requires the City to continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies that have purview over natural resources and sensitive habitats. This policy will encourage early involvement of the agencies in the planning process relative to the preservation of sensitive resources.

Special Status Wildlife

Several special status wildlife species are known to occur or have the potential to occur within the proposed General Plan Update Study Area, including those listed as Threatened or Endangered. Impacts on these species may be considered significant if a project's impacts would result in a substantial loss to the regional population of the species.

Any project within the General Plan area that impacts a State or Federally listed Threatened or Endangered species will be required to secure Take Authorization through the CESA and/or FESA prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). In addition, special status wildlife species that are not listed as Threatened or

Endangered will also be evaluated to determine if project impacts would be considered significant by the City. If impacts are found to be significant, appropriate mitigation would be required in coordination with the City.

To avoid conflicts with the Migratory Bird Treaty Act; the Bald and Golden Eagle Protection Act; and Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code*, construction activities involving vegetation removal should be conducted between September 16 and March 14 (refer to SC 4.4-4 and SC 4.4-5). If construction occurs inside the peak nesting season (between March 15 and September 15), a pre-construction survey (or possibly multiple surveys) by a qualified Biologist are recommended prior to construction activities in order to identify any active nesting locations. Appropriate measures shall be implemented to ensure that no inadvertent impacts on avian species occur.

Impact 4.4a: Buildout of the proposed General Plan Update Study Area has the potential to impact special status species; however, compliance with General Plan policies RC-1.1, RC-8.1, RC 8.2, RC-8.3, and LU-8.5, and Standard Conditions SC 4.4-1, SC 4.4-2, SC 4.4-3, SC 4.4-4, and SC 4.4-5 would ensure that impacts would be less than significant; no mitigation is required.

Riparian Habitat and Jurisdictional Areas

Threshold 4.4b: Would the proposed General Plan Update have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS?

Threshold 4.4c: Would the proposed General Plan Update have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Implementation of the proposed General Plan Update would result in the loss of areas potentially under the jurisdiction of the CDFG and/or USACE.

A jurisdictional delineation should be conducted if the a proposed project will impact jurisdictional resources (refer to SC 4.4-6). Permits/agreements from the USACE, the RWQCB, and the CDFG will be required for impacts on areas within these agencies' jurisdictions. Acquisition and implementation of the permits may require mitigation (refer to SC 4.4-7). Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted).

In addition to the potential for jurisdictional wetland areas, the following special status vegetation types have been reported within the proposed General Plan Update Study Area: California walnut woodland, coastal and valley freshwater marsh, scale broom scrub, southern sycamore alder riparian woodland, and coast live oak woodland. As required under Policy RC-1.1, the City will implement actions that preserve sensitive land resources having significant native vegetation and/or habitat value, which could offset impacts to special status resources. Policy RC-8.1 also requires the City to implement actions that result in the preservation of the integrity of riparian habitat areas, creek corridors, Riverside Alluvial Fan Sage Scrub, bogs, and sensitive wildlife habitat that supports biological resources. The City shall pursue these actions that provide appropriate long-term protection of areas within the City's SOI that contain sensitive

habitat and which are considered of unique value in enhancing the quality of the local environment.

Additionally, and as required by Policy RC-8.2, the City is required to consult with the County and other agencies to support the preservation of streamside woodland areas along the foothills of the San Gabriel Mountains, including the North Etiwanda Preserve. The City will require development proposals that include riparian or water-related communities to prepare a site-specific investigation to define the extent and fragility of the riparian community, determine wetland permit requirements, and propose measures to mitigate any impacts on the resources stemming from land disturbance or other site development.

Impacts 4.4b and 4.4c: Proposed development projects within the City have the potential to impact protected wetland areas and other significant natural communities; however, compliance with General Plan policies RC-1.1, RC-8.1, and RC-8.2, and Standard Conditions SC 4.4-6 and SC 4.4-7 would ensure that potential impacts would be less than significant; no mitigation is required.

Wildlife Movement

Threshold 4.4d: Would the proposed General Plan Update interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The proposed General Plan Update Study Area is primarily located in an urban area that does not contain large, contiguous natural open space areas. The remnant patches of natural open space within the City boundaries are largely unconnected. However, wildlife may potentially move through the north/south trending tributaries in the northern portion of the proposed General Plan Update Study Area. The SOI areas along the foothills of the San Gabriel Mountains do contain some large, contiguous open space areas. Anticipated future build out of the proposed General Plan Update Study Area may result in fragmentation of unprotected areas in the northern portion of the City and the SOI, thus inhibiting wildlife movement between remaining open space areas. As described in Policy RC-8.4, however, the City is required to acquire and/or protect open space areas that provide strategic wildlife corridors and that provide vital connectivity between habitat areas. Therefore, buildout of the proposed General Plan Update Study Area would result in a less than significant impact related to wildlife movement assuming compliance with this General Plan policy.

The proposed General Plan Update Study Area does not contain known native wildlife nursery sites; therefore, buildout of the proposed General Plan Update Study Area would not result in an impact; no mitigation is required.

Impact 4.4d: Buildout of the proposed General Plan Update Study Area has the potential to disrupt wildlife movement through the loss of open space corridors; however, compliance with General Plan Policy RC-8.4 would ensure that potential impacts would be less than significant; no mitigation is required.

Biological Resource Policies

Threshold 4.4e: Would the proposed General Plan Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances?

Future buildout of the proposed General Plan Update Study Area is expected to result in the loss of trees or plants that are protected by City and County codes. Specifically, the projects pursuant to the proposed General Plan Update could involve clearing, grading, and construction of structures on currently undeveloped lands which may contain individuals or groups of a protected tree or plant as defined by City and County codes. Assuming compliance with SC 4.4-8 and SC 4.4-9, a permit shall be obtained for the removal or destruction of any protected plants, thereby ensuring that any impacts would be less than significant; no mitigation is required.

Impact 4.4e: Buildout of the proposed General Plan Update Study Area has the potential to result in removal of trees and plants protected by local and County ordinances. However, compliance with County and City codes (SC 4.4-8 and SC 4.4-9, respectively), would ensure that these impacts would be less than significant; no mitigation is required.

Habitat Conservation Plans/Natural Community Conservation Plans

Threshold 4.4f: Would the proposed General Plan Update conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?

Neither the City nor the SOI lie within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan area; therefore, buildout of the proposed General Plan Update Study Area would not conflict with the provisions of an adopted plan. No impact would occur; no mitigation is required.

Impact 4.4f: The General Plan Study Area is not located within an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. No impact would occur; no mitigation is required.

4.4.7 CUMULATIVE IMPACTS

The proposed General Plan Update Study Area is predominantly surrounded by urban development to the south, east, and west. Future projects within these areas would occur within areas that do not contain significant biological resources. However, lands to the north of the SOI exist largely as undeveloped open space that is under the jurisdiction of the U.S. Forest Service (USFS). Pursuant to the USFS mission of sustaining the health, diversity, and productivity of the nation's forests and grasslands, development is limited within this area; therefore, future impacts to biological resources would also be limited and would not constitute significant impacts. Because the General Plan Study Area is relatively isolated from other areas containing significant biological resources that would also be subject to future development, the potential impacts related to build out of the proposed General Plan Update Study Area would not contribute to a cumulatively significant impact. Additionally, impacts related to buildout of the proposed General Plan Update Study Area are anticipated to be less than significant assuming compliance with proposed General Plan policies and existing standard conditions.

4.4.8 MITIGATION MEASURES

With implementation of the policies in the proposed General Plan Update and compliance with the standard conditions, no significant adverse impacts on biological resources are expected. Thus, no mitigation measures are required.

4.4.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Special Status Species

Less Than Significant.

Riparian Habitat and Jurisdictional Areas

Less Than Significant.

Wildlife Movement

Less Than Significant.

Biological Resource Policies

Less Than Significant.

Habitat Conservation Plans/Natural Community Conservation Plans

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.5 CLIMATE CHANGE

This section analyzes greenhouse gas emissions and climate change impacts associated with implementation of the proposed project. At the direction of the State Legislature in Senate Bill (SB) 97, the California Natural Resources Agency recently adopted amendments to the California Environmental Quality Act (CEQA) Guidelines that require analysis of climate change and greenhouse gas (GHG) emissions in CEQA documents¹. (CNRA 2009a) Information in this section is derived in part from the *Greenhouse Gas Assessment for the Rancho Cucamonga General Plan Update, City of Rancho Cucamonga* prepared by Mestre Greve Associates and dated January 2010 which is included in its entirety as Appendix D.

4.5.1 RELEVANT POLICIES AND REGULATIONS

Federal

The Federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act (92 Stat. 601), which required the President to establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” The 1987 Global Climate Protection Act (Title XI of Pub. L. 100-204), directed the U.S. Environmental Protection Agency (USEPA) to propose a “coordinated national policy on global climate change,” and ordered the Secretary of State to work “through the channels of multilateral diplomacy” to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric greenhouse gases (GHGs).

More recently, in *Massachusetts v. EPA* (April 2, 2007), the United States Supreme Court held that GHGs fall within the Clean Air Act’s definition of an “air pollutant,” and directed the USEPA to consider whether GHGs are causing climate change. If so, the USEPA must regulate GHG emissions from automobiles under the Clean Air Act.

There are no Federal laws or regulations governing GHG emissions. However, the following statement by the U.S. Environmental Protection Agency (USEPA) describes the most recent Federal administrative action.

On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act. The rule 1) declares that GHGs endanger human health and 2) represents the first step to regulation through the Federal Clean Air Act. The USEPA defines six key GHGs (carbon dioxide [CO₂], methane [CH₄], nitrous oxide [N₂O], hydroflourocarbons [HFCs], perflourocarbons [PFCs], and sulfur hexaflouride [SF₆]). The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare. These findings do not impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the USEPA’s proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by USEPA and the Department of Transportation’s National Highway Safety Administration on September 15, 2009.

In addition, Congress has increased the corporate average fuel economy (CAFE) of the U.S. automotive fleet. In December 2007, former President Bush signed a bill raising the minimum

¹ The CEQA Guidelines revisions were adopted December 30, 2009. The Adopted Amendments will not become effective until after the Office of Administrative Law completes its review of the Adopted Amendments and rulemaking file, and transmits the Adopted Amendments to the Secretary of State for inclusion in the *California Code of Regulations* (CNRA 2009a).

average miles per gallon for cars, sport utility vehicles, and light trucks to 35 miles per gallon by 2020. This increase in CAFE standard will create a substantial reduction in GHG emissions from automobiles, which is the largest single emitting GHG sector in California.

Multi-State

Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative (2007) includes Arizona, California, New Mexico, Oregon, Utah, Washington. Acknowledging that the western states already experience a hotter, drier climate, the Governors of the foregoing states have committed to three time-sensitive actions: (1) by August 26, 2007, to set a regional goal to reduce emissions from the states collectively, consistent with state-by state goals; (2) by August 26, 2008, to develop “a design for a regional market-based multi-sector mechanism, such as a load-based cap and trade program, to achieve the regional GHG reduction goal;” and (3) to participate in a multi-state GHG registry “to enable tracking, management, and crediting for entities that reduce GHG emissions, consistent with state GHG reporting mechanisms and requirements.”

Western Climate Initiative

The Western Climate Initiative (WCI), a regional collaboration between the Governors of Arizona, California, New Mexico, Oregon and Washington and the Canadian provinces of British Columbia and Manitoba (joined in April 2007), has established a regional goal to reduce greenhouse gas (GHG) emissions in the west to 15 percent below 2005 levels by 2020. The regional goal does not replace the individual state’s goals regarding GHG emissions, but rather the WCI members will use the regional goal in the design of the multi-sector market-based mechanism.

State

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to climate change impacts. It declares that increased temperatures could reduce snowpack in the Sierra Nevadas, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. In an effort to avoid or reduce climate change impacts, Executive Order S-3-05 calls for a reduction in GHG emissions to 2000 levels by 2010; 1990 levels by 2020; and for an 80 percent reduction in GHG emissions below 1990 levels by 2050. It also directs the California Environmental Protection Agency (CalEPA) to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy.

Assembly Bill 1493

Assembly Bill (AB) 1493 (2002)(*Health and Safety Code § 43018.5*) required CARB to develop and adopt the nation’s first GHG emission standards for automobiles. Subsequent to prolonged litigation, the USEPA denied California’s waiver request. California filed a petition with the Ninth Circuit Court of Appeals challenging the USEPA’s denial on January 2, 2008. The Obama Administration subsequently directed the USEPA to re-examine its decision. On May 19, 2009, challenging parties, automakers, the State of California, and the Federal government reached an agreement on a series of actions that would resolve these current and potential future disputes over the standards through model year 2016. In summary, the USEPA and the USDOT agreed to adopt a Federal program to reduce GHGs and improve fuel economy, respectively,

from passenger vehicles in order to achieve equivalent or greater GHG benefits as the AB 1493 regulations for the 2012–2016 model years. Manufacturers agreed to ultimately drop current and forego similar future legal challenges, including challenging a waiver grant, which occurred on June 30, 2009. The State of California committed to revising (1) its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission standard by “pooling” California and specified State vehicle sales; (2) its standards for 2012–2016 model year vehicles so that compliance with USEPA-adopted GHG standards would also comply with California’s standards; and (3) its standards, as necessary, to allow manufacturers to use emissions data from the Federal CAFE program to demonstrate compliance with the AB 1493 regulations (CARB 2009a).

Assembly Bill 32

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (*Health and Safety Code § 38500 et seq.*). AB 32 directs the California Air Resources Board (CARB) to do the following:

- On or before June 30, 2007, CARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;²
- By January 1, 2008, establish the Statewide GHG emissions cap for 2020, based on CARB’s calculation of Statewide GHG emissions in 1990 (an approximately 25 percent reduction in existing Statewide GHG emissions);
- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that “contribute the most to Statewide emissions” (Health & Safety Code § 38530);
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the Statewide GHG emissions limit by 2020;
- On January 1, 2012, CARB’s GHG emissions regulations become operative; and
- On January 1, 2020, achieve 1990 levels of GHG emissions.

California Air Resource Board

The CARB is the lead agency for implementing AB 32. In December 2008, CARB adopted a Scoping Plan, in coordination with the Climate Action Team (CAT), to establish a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California. The measures in the Scoping Plan approved by the CARB will be developed over the next two years and be in place by 2020. According to climate scientists, California and the rest of the developed world will have to cut emissions by 80 percent from today’s levels to stabilize

² The current status of implementation of the totality of CARB’s early action measures is not known based on publicly available information.

the amount of CO₂ in the atmosphere and prevent the most severe effects of global climate change. This long range goal is reflected in California Executive Order S-3-05 that requires an 80 percent reduction of greenhouse gases from 1990 levels by 2050. Reducing GHG emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of CO equivalent for every man, woman and child in California down to about 10 tons per person by 2020.

Significant progress can be made toward the 2020 goal through existing technologies, and improving the efficiency of energy use. Other solutions involve improving the State's infrastructure, transitioning to cleaner and more secure sources of energy, and adopting 21st Century land use planning and development practices. Key elements of California's recommendations for reducing its greenhouse gas emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standard;
- Achieving a Statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long term commitment to AB 32 implementation.

CARB anticipated a 5 MMTCO₂e reduction for Regional Transportation-Related Greenhouse Gas Targets. To meet the 1990 target established by CARB, CARB recommends a de minimis (minimal importance) emission threshold of 0.1 MMT annual (100,000 MT per year) CO₂e per transportation source category. Source categories whose total aggregated emissions are below this level are not proposed for emission reduction requirements in the Scoping Plan but may contribute toward the target via other means. As each regulation to implement the Scoping Plan is developed, CARB and other agencies will consider more specific de minimis levels below which the regulatory requirements would not apply. These levels will consider the cost to comply, especially for small businesses, and other factors. Until approved thresholds and guidelines are adopted at the local and regional level, the proposed de minimis threshold of 100,000 MTCO₂e per year for transportation sources will be utilized.

In addition to the Scoping Plan, CARB released the Preliminary Draft Staff Proposal (Staff Proposal) on October 24, 2008 with the objective of developing interim significance thresholds for commercial and residential projects. CARB has proposed a threshold of 7,000 annual MT for industrial operational sources. However, the Staff Proposal does not yet include thresholds applicable for residential and commercial sources. Therefore, criteria for determining threshold levels for residential and commercial sources have yet to be defined. Under CARB's Staff Proposal, recommended approaches for setting interim significant thresholds for GHG under the CEQA are underway. CARB staff proposes to define certain performance standards

(e.g., for energy efficiency) by referencing or compiling lists from existing local, State or national standards. For some sub-sources of GHG emissions (e.g. construction, transportation, waste), CARB staff has not identified reference standards.

The Staff Proposal's Potential Performance Standards and Measures report was released in December 2008. Within the Proposal, CARB's Potential Performance Standard and Measures included some construction measures. These guideline measures are:

- Provide alternative transportation mode options or incentives for workers to and from worksite on days that construction requires 200 or more workers;
- Recycle and/or salvage at least 75 percent of non-hazardous construction and demolition debris by weight (residential) or by weight in volume (commercial); and
- Use recycled materials for at least 20 percent of construction materials based on cost for building materials and based on volume for roadway, parking lot, sidewalk, and curb material. Recycled materials may include salvaged, reused, and recycled content materials.

CARB's Staff Proposal has identified CEC's Tier II Energy Efficiency goals as an appropriate performance standard for energy use. Under State law, the CEC is required to establish eligibility criteria, conditions for incentives, and rating standards. Thus, the CEC established energy efficiency standards for homes and commercial structures, and requires new buildings to exceed current building standards by meeting Tier II Energy Efficiency goals. Currently, CEC's proposed guidelines for the solar energy incentive program recommend a Tier II goal for residential and commercial projects of a 30 percent reduction in building combined space heating, cooling, and water heating energy compared to the 2008 Title 24 standards.

Existing green building rating systems like LEED, GreenPoint Rated, the California Green Building Code, and others, contain examples of measures that are expected to result in substantial GHG emission reductions from residential and commercial projects. Performance standards that already exist and have been proven to be effective at the local, State, national or international level are preferable. For residential and commercial projects, staff has proposed that the GHG emissions of some projects that meet GHG performance standards might, under some circumstances, still be considered cumulatively considerable and therefore significant. However, criteria threshold for residential and commercial have yet to be developed.

AB 32 takes into account the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring CARB to recommend a *de minimis* (minimal importance) threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire State to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

CARB Mandatory Reporting Regulations and Scoping Plan

In December 2008, CARB propounded regulations to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO₂ from stationary source combustion.

Also in December 2008, CARB adopted a Scoping Plan pursuant to AB 32.

Executive Order S-01-07

Executive Order S-01-07 (2007) calls for a reduction in the carbon intensity of California's transportation fuels by at least 10 percent by 2020. As noted above, the low-carbon fuel standard ("LCFS") was adopted by CARB as one of its three "early action measures" on June 21, 2007.

Executive Order S-13-08

In November 2008, Governor Schwarzenegger issued Executive Order S-13-08 directing State agencies to plan for sea level rise and other climate change impacts. There are four key actions in the Executive Order: (1) initiation of a climate change adaptation strategy that will assess the State's expected climate change impacts where the State is most vulnerable, with recommendations by early 2009; (2) an expert panel on sea level rise will inform State planning and development efforts; (3) interim guidance to State agencies on planning for sea level rise in coastal and floodplain areas for new projects; and (4) initiation of a report on critical existing and planned infrastructure projects vulnerable to sea level rise.

Senate Bill 1368

Senate Bill (SB) 1368 (2006)(*Public Utilities Code §§ 8340-41*) requires the California Public Utilities Commission (PUC) to establish a "GHG emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the State's three largest privately-owned utilities. These utilities provide approximately 30 percent of the State's electric power. After the PUC acted, the California Energy Commission (CEC) adopted a performance standard "consistent with" the PUC performance standard and applied it to local publicly-owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007 deadline). However, the California Office of Administrative Law (OAL) found four alleged flaws in the CEC's rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.

Senate Bill 107

SB 107 (2006) requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric, to ensure 20 percent of their electricity is generated from renewable sources by 2010. Previously, State law required that this target be achieved by 2017. Based on pending and approved contracts, the investor-owned utilities are expected to achieve the 20 percent target in the 2013 - 2014 timeframe (CPUC 2009).

Senate Bill 97.

Recent amendments to CEQA Guidelines Senate Bill (SB) 97 directs the California Natural Resources Agency (CNRA) to adopt amendments to the CEQA Guidelines that require evaluation of GHG emissions or the effects of GHG emissions by January 1, 2010. The CNRA has done so, and the amendments to the CEQA Guidelines, in a new Section 15064.4, titled Determining the Significance of Impacts from Greenhouse Gas Emissions, provide that (CNRA 2009b):

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the

amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The amendments add a new Section 15126.4 (c) Mitigation Measures Related to Greenhouse Gas Emissions. This new section includes the following:

“Lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;”

Appendix F, Energy Conservation, in Section II. EIR Contents includes the following:

“D. Mitigation Measures may include:

1. Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures

were incorporated in the Project and why other measures were dismissed.

2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid-waste.
3. The potential for reducing peak energy demand.
4. Alternate fuels (particularly renewable ones) or energy systems.
5. Energy conservation which could result from recycling efforts.”

Senate Bill 375

In September 2008, SB 375 was signed by Governor Schwarzenegger. SB 375 is a comprehensive global warming bill that helps to achieve the goals of AB32. To help establish targets, the CARB assigned a Regional Targets Advisory Committee to recommend factors to be considered and methodologies for setting greenhouse gas emission reduction targets. SB 375 also provides incentive – relief from certain CEQA requirements for development projects that are consistent with regional plans that achieve the targets. SB 375 requires CARB to develop, in collaboration with Metropolitan Planning Organizations (MPOs), which is the Southern California Association of Governments (SCAG) for the City of Rancho Cucamonga, passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. The MPOs are required to include and adopt, in their regional transportation plan, a sustainable community strategy that will meet the region’s target provided by CARB.

SCAG began work in January 2009 on the next RTP, scheduled for adoption in Spring 2012. This will be the first RTP developed pursuant to SB 375, which includes requirements for inclusion of a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy to meet a greenhouse gas (GHG) emission reduction target for light and medium duty vehicles and for integration of the growth forecast for the RTP with the Regional Housing Needs Assessment (RHNA).

SB 375 provides for subregions and transportation commissions to develop their own subregional SCS to be integrated into the regional plan. These entities are delegated RHNA responsibilities if they choose to take on this task. Thus far, financial support from State sources to support this work is lacking. Final regional targets are scheduled to be established by CARB by October 1, 2010, but SCAG is requested subregional commitments to prepare subregional SCSs by the later part of 2009. SANBAG has developed and maintained land use databases and planning tools and coordinated local agency input to support regional growth forecasts and RHNAs, and will do so on the 2012 RTP as well. In addition, SANBAG, in cooperation with SCAG and many member agencies, has recently completed a multi-jurisdictional COMPASS implementation study that is expected to provide a basis for the SCS within San Bernardino County. SCAG’s Compass Blueprint 2% Strategy seeks to promote integration of land use and transportation in order to make efficient use of infrastructure investments for new higher density and mixed use development. When this happens, it is expected that regional mobility will improve, neighborhoods will be livable, the community will prosper and the region will be sustainable.

Assembly Bill 811

AB 811 would authorize all cities and counties in California to designate areas within which willing property owners could enter into contractual assessments to finance the installation of distributed renewable generation, as well as energy efficiency improvements, that are permanently fixed to the property owner's residential, commercial, industrial, or other real property. These financing arrangements would allow property owners to finance renewable generation and energy efficiency improvements through low-interest loans that would be repaid as an item on the property owner's property tax bill. The contractual assessments could not be used to finance the purchase or installation of appliances that are not permanently fixed to the real property.

California's Renewable Energy Portfolio Standard Program

In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent by 2017. The State's most recent Energy Action Plan (2005) raises the renewable energy goal from 20 percent by 2017, to 33 percent by 2020.

Title 24 Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the *California Code of Regulations* [CCR]) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Since that time, the energy efficiency standards have undergone several revisions. Most recently, the California Energy Commission (CEC) adopted the 2008 changes to the Building Energy Efficiency Standards as a response to recent legislative and policy directives, including AB 32. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) "Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy" and (2) "Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020" (CEC 2009). Effective January 1, 2010, the adopted 2008 Title 24 standards replaced the 2005 Title 24 standards.

An impact analysis of the 2008 Energy Efficiency Standards estimates that compared to the 2005 Standards, for new multi-family residential construction, electricity use will be reduced by 19.7 percent; peak demand will be reduced by 7.4 percent; and gas consumption will be reduced by 7.0 percent. For new single-family residential construction, electricity use will be reduced by 22.7 percent; peak demand will be reduced by 8.2 percent; and gas consumption will be reduced by 10.0 percent. These percent savings are relative to heating, cooling, lighting, and water heating only and do not include other appliances, outdoor lighting that is not attached to buildings, plug loads, or other energy uses (CEC 2007b).

Attorney General

The California Attorney General (AG) has filed numerous comment letters with agencies discussing their analysis of climate change in CEQA documents. As part of the AG's efforts to work with agencies on addressing climate change in their CEQA documents, the AG publishes and updates *Sustainability and General Plans: Examples of Policies to Address Climate Change*. In the most recent version, the AG states, "a local government has a greater number of mitigation and adaption options when it looks at the "big picture" than if the analysis is done only at the project-specific level." (DOJ 2010) Among the many resources recommended by the AG is the California Air Pollution Control Officers Association (CAPCOA), *Model Policies for Greenhouse Gases in General Plans* (June 2009), as described in the following paragraph. The

AG notes, "This white paper sets out objectives, goals, and well over 350 general plan policies designed to reduce greenhouse gas emissions and create more sustainable, livable communities."

California Air Pollution Control Officers Association

The introduction to CAPCOA's *Model Policies for Greenhouse Gases in General Plans* includes the following:

"CAPCOA has prepared this white paper consideration of model policies for addressing greenhouse gas emissions in General Plans to provide a common platform of information and tools to support local governments. This paper is intended as a resource, not a guidance document. It is not intended, and should not be interpreted, to dictate the manner in which a city or county chooses to address greenhouse gas emissions in the context of its General Plan.

This paper has been prepared at a time of flux in California law and regulation, as well as accepted practice, regarding how climate change should be addressed in government programs. There is . . . active legislation at the Federal level. And finally, our understanding of the science of climate change continues to evolve, too. In the face of this uncertainty, local governments are working to understand the new expectations, and how best to meet them. This paper is provided as a resource to local policy and decision makers to enable them to make the best decisions they can during this period of uncertainty." (CAPCOA 2009)

The majority of the report is comprised of model policies for GHG reduction that can be incorporated into a jurisdiction's General Plan. Model language is provided in nine major categories: GHG Reduction Planning (overall); Land Use and Urban Design; Transportation; Energy Efficiency; Alternative Energy; Municipal Operations; Waste Reduction and Diversion; Conservation and Open Space; and Education. A comparison of the proposed Rancho Cucamonga General Plan policies with CAPCOA recommended policies is included in Section 4.5.6 of this analysis.

Climate Action Registry

SB 1771 and SB 527 (2001) created the structure of the California Climate Action Registry (Registry), and former Governor Gray Davis signed the final version of the Registry's enabling legislation into law on October 13, 2001. These bills establish the Registry as a non-profit entity to help companies and organizations establish GHG emissions baselines against which future GHG emission reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual GHG emissions with the Registry. In return for this voluntary action, the State of California promises to offer its "best efforts" to ensure that participants receive consideration for their early action if they are subject to any future State, Federal, or international emissions regulatory scheme.

Regional

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB), which includes all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties, which includes Rancho Cucamonga. To that end, the SCAQMD, a regional agency, works

directly with SCAG, County transportation commissions, and local governments and cooperates actively with all Federal and State government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

The South Coast Air Quality Management District (SCAQMD) adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and,
- Support the adoption of a California GHG emission reduction goal.

Beginning in April 2008, the SCAQMD convened a working group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. The Working Group meets approximately once per month. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for industrial projects where the SCAQMD is the lead agency (SCAQMD 2008). The interim screening threshold for industrial projects is 10,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/yr). The Working Group has adopted a philosophy similar to recommendations made by other agencies in California to identify “Significance Screening Levels” (or thresholds) for GHG emissions. Projects with GHG emissions less than these levels or thresholds would be less than significant although the projects may be required to demonstrate (1) energy efficiency greater than that required by the California Building Code (commonly referred to as Title 24 standards) and (2) water use efficiency, such as recycled water use or the installation of “smart” controllers for landscape irrigation. Projects with GHG emissions greater than the Significance Screening Levels would be required to implement specific performance standards or purchase offsets³ to reduce the climate change impact(s) to less than significant. The SCAQMD continues to consider screening levels under CEQA for residential, commercial, and mixed-use projects.

4.5.2 EXISTING CONDITIONS

Climate Change Background

The Earth’s climate has always been in the process of changing, due to many different natural factors. However, since the late 18th century, humans have had an increasing impact of the rate of climate change beginning with the Industrial Revolution. Many human activities have augmented the amount of GHGs being released into our atmosphere, specifically through the burning of fossil fuels, such as coal and oil, and deforestation. The gases increase the efficiency

³ Purchase of offsets consists of contributions to a fund that would be used to implement GHG emission reductions at some location other than the Project site.

of the greenhouse effect, which is the process of trapping and recycling energy (in the form of heat) that the Earth emits naturally, resulting in higher temperatures worldwide. The Intergovernmental Panel on Climate Change (IPCC) stated in February 2007 that warming is unequivocal, expressing very high confidence (expressed as a nine out of ten chance of being correct) that the net effect of human activities since 1750 has been one of warming. According to the National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) data, the average surface temperature of the Earth has increased by about 1.2 to 1.4 degrees Fahrenheit (°F) since 1900. The warmest global average temperatures in human record have all occurred within the past 15 years, with the warmest two years being 1998 and 2005.

This process of heating is often referred to as 'global warming', although the National Academy of Sciences prefers the terms 'climate change' as an umbrella phrase which includes global warming as well as other environmental changes. Some of these effects include changes to rainfall, wind, and current weather patterns, as well as snow and ice cover, and sea level. The potential effects of climate change are discussed further below.

Depending on which GHG emissions scenario is used, climate models predict that the Earth's average temperature could rise anywhere between 2.5 to 10.4°F from the average recorded temperature in 1990 to the end of this century. The degree of change is influenced by the assumed amount of GHG emissions, and how quickly atmospheric GHG levels are stabilized. Current climate change models are not capable of predicting local impacts, but predict global trends.

GHGs

Some GHGs emitted into the atmosphere are naturally occurring, while others are caused solely by human activities. The principal GHGs that enter the atmosphere because of human activities are:

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), agriculture, irrigation, and deforestation, as well as the manufacturing of cement.
- **Methane (CH₄)** is emitted through the production and transportation of coal, natural gas, and oil, as well as from livestock. Other agricultural activities influence methane emissions as well as the decay of waste in landfills.
- **Nitrous oxide (N₂O)** is released most often during the burning of fuel at high temperatures. This greenhouse gas is caused mostly by motor vehicles, which also include non-road vehicles, such as those used for agriculture.
- **Fluorinated Gases** are emitted primarily from industrial sources, which often include hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Though they are often released in smaller quantities, they are referred to as High Global Warming Potential Gases because of their ability to cause global warming. Fluorinated gases are often used as substitutes for ozone depleting substances.

These gases have different potentials for trapping heat in the atmosphere, called global warming potential (GWP). For example, one pound of methane has 21 times more heat capturing potential than one pound of carbon dioxide, which represents a GWP of 1. Because of the differences in GWP between gases, when dealing with an array of emissions, the gases are converted to carbon dioxide equivalents for comparison purposes. Global GHG emissions are

measured in million metric tons of carbon dioxide equivalent (MMTCO₂e) units. A metric ton is approximately 2,205 pounds (lbs). Processes that absorb and accumulate CO₂, often called CO₂ “sinks,” include absorption by vegetation and dissolution into the ocean.

Effects of Climate Change

The long-term effects of global warming may include sea level rise that could cause erosion and flooding of coastal cities and villages, as well as more intense hurricanes and typhoons worldwide. In the United States, Chicago is projected to experience 25 percent more frequent heat waves and Los Angeles would experience a four-to-eight-fold increase in heat wave days by the end of the century. In 2006, the California Climate Change Center predicted that California could witness the following events:

- Temperature increases between 3 and 10.5°F;
- 6 to 20 inches or more increase in sea level;
- 2 to 4 times as many heat wave days in major urban centers;
- 2 to 6 times as many heat-related deaths in major urban centers;
- 1 to 1.5 times more critically dry years; and
- 10 to 55 percent increase in the risk of wildfires.

In the field of climate change, there is the concept of adaptation, which refers to potential climate change impacts on a project, the responses to the changing climate and policies to minimize the predicted impacts. For projects in California, adaptation “impacts” related to climate change have altered weather patterns and water supply, leading to increased water shortages (i.e., a dwindling snowpack, bigger flood flows, rising sea levels, longer and harsher droughts). Water supplies are also at risk from rising sea levels. Risks may include degrading California’s estuaries, wetlands, and groundwater aquifers, which would threaten the quality and reliability of the major California fresh water supply. Higher temperatures would also likely increase electricity demand due to higher air conditioning use. Even if the population remained unchanged, toward the end of the century annual electricity demand could increase by as much as 20 percent if temperatures rise into the higher warming range, though implementing aggressive efficiency measures could lower this estimate. Higher temperatures may also lead to increased water usage for landscaping. However, of these climate change issues, sea level rise is not a concern in Rancho Cucamonga given its distance from the ocean.

Existing Greenhouse Gas Emissions

To put perspective on the emissions generated by a project and to better understand the sources of GHGs, it is important to look at emission inventories. The United Nations has taken the lead in quantifying GHG emissions and compiling the literature on climate change. The United Nations’ estimate for CO₂ equivalents for the world and for the top ten CO₂ producing countries is presented in Table 4.5-1.

**TABLE 4.5-1
TOP TEN CO₂ PRODUCING NATIONS BETWEEN 1990–2004**

County	Emissions (MMTCO ₂ e)	Percent of Global Emissions
1. United States	7017.32	21.06%
2. China	4057.31	12.17%
3. Japan	1340.08	4.02%
4. India	1214.25	3.64%
5. Germany	1004.79	3.02%
6. Canada	720.63	2.16%
7. Brazil	658.98	1.98%
8. United Kingdom	655.79	1.97%
9. Italy	567.92	1.70%
10. France	546.53	1.64%
Total Global	33,326	N/A
N/A: Not Applicable Source: Mestre Greve 2009		

As shown, global CO₂ equivalent emissions totaled 33,326 MMTCO₂e in 2006. Of this, the United States released 7,017 MMTCO₂e in 2006, which is approximately 21 percent of global emissions. Within the United States, California is the state with the second highest level of GHG production in 2006, at 480 MMTCO₂e, or 1.44 percent of the earth's emissions (Texas has the highest). In 2001, the burning of fossil fuels produced over 81 percent of total GHG emissions from the United States.

California GHG Emissions

In a December 2006 report, CARB estimated that California emitted between 425 and 468 million metric tons of CO₂ in 1990. In December 2007, CARB finalized 1990 emissions at 427 million metric tons of CO₂. In the August 2007 draft report, CARB estimated California emitted approximately 480 million metric tons of CO₂ in 2004. More recent data from the U.S. Census Bureau indicates that the total emission is about 13 metric tons of CO₂ per capita, based on a 2007 California population of 36,553,215.

The CEC categorizes GHG generation by source into five broad categories, as follows:

- **Transportation** includes the combustion of gasoline and diesel in automobiles and trucks. Transportation also includes jet fuel consumption and bunker fuel for ships.
- **Agriculture and forestry** GHG emissions are composed mostly of nitrous oxide from agricultural soil management, CO₂ from forestry practice changes, methane from enteric fermentation that takes place in the digestive systems of animals, and methane and nitrous oxide from manure management.
- **Commercial and residential** uses generate GHG emissions primarily from the combustion of natural gas for space and water heating.
- **Industrial** GHG emissions are produced from many industrial activities. Major contributors include oil and natural gas extraction; crude oil refining; food processing; stone, clay, glass, and cement manufacturing; chemical manufacturing; and cement production. Wastewater treatment plants are also significant contributors to this category.

- **Electricity generation** includes both emissions from power plants in California as well as power plants located outside of the State that supply electricity to the State.

Consumption of fossil fuels in the transportation sector (such as automobiles, trucks, and airplanes) was the single largest source of GHG emissions in California, accounting for 40.7 percent of total GHG emissions in the State, between 1990 and 2004. This category was followed by the electric power sector (including both in-state and out-of-state sources) (22.2 percent) and the industrial sector (20.5 percent). The smallest GHG contributors are the commercial and residential sector, as well as the agricultural and forestry sector, accounted for about 10 percent and 8 percent, respectively.

While California has the second highest rate of GHG production in the nation, California has one of the lowest per capita rates of GHG emissions. California had the fourth lowest per capita rate of CO₂ production from fossil fuels in the United States in 2001. Wyoming produced the most CO₂ per capita, while the District of Columbia produced the least.

4.5.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to land use and planning if it would:

Threshold 4.5a: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Threshold 4.5b: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

There are no established local quantitative significance criteria for GHG emissions impacts. A June 2008 OPR Technical Advisory encouraged lead agencies to analyze GHG emissions in environmental documents and to follow three basic steps: (1) identify and quantify the GHG emissions that could result from a proposed project; (2) analyze the effects of those emissions and determine whether the effect is significant; and (3) identify feasible mitigation measures or alternatives that would reduce the impact to below a level of significance if the impact is significant (OPR 2008). The revisions to the CEQA guidelines allow lead agencies to select specific significance criteria in a similar manner as occurs for air pollutants.

As described in Section 4.5.1 above, CARB recommends a de minimis emission threshold of 100,000 MT per year CO₂e for transportation sources. Transportation projects whose total aggregated emissions are below this level are not proposed for emission reduction requirements in the Scoping Plan. Since the proposed 2010 General Plan Update is an areawide project, similar to most transportation projects, the CARB threshold is the most relevant and will be applied to the proposed 2010 General Plan Update for Threshold 4.5a. Therefore, the proposed 2010 General Plan Update would result in significant impact if it would result in a net increase of GHG emissions of 100,000 MTCO₂e per year or more.

Because of the global nature of the climate change problem, most projects will not result in GHG emissions that are individually significant (CAPCOA 2009). This concept is supported in the various AG, OPR, and SCAQMD publications described above that almost exclusively address cumulative impacts. Therefore, it is accepted as very unlikely that any individual development project or General Plan would have GHG emissions of a magnitude to directly impact global climate change and the impact of the proposed 2010 General Plan Update is considered on a cumulative basis.

4.5.4 GENERAL PLAN GOALS AND POLICIES

Many goals and policies in the proposed Rancho Cucamonga 2010 General Plan Update address issues directly or indirectly related to GHG emission reduction. These issues include but are not limited to vehicle trip reduction, energy conservation, water conservation, and reduction of solid waste. Implementation of these goals and policies and their corresponding implementation actions would reduce GHG emissions impacts and demonstrate conformity with plans, policies, and regulations adopted for the purpose of reducing GHG emissions. 2010 General Plan Update Chapters and the Implementation Plan include goals, policies, and implementation actions related to GHG emissions, as listed below.

Goal LU-2: Facilitate sustainable and attractive infill development that complements surrounding neighborhoods and is accessible to pedestrians, bicycles, transit, and automobiles.

Policy LU-2.1: Plan for vibrant, pedestrian-friendly mixed-use and high-density residential areas at strategic infill locations along transit routes.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.*

Policy LU-2.2: Require new infill development to be designed for pedestrians and automobiles equally, and to provide connections to transit and bicycle facilities.

Implementation Action: *Continue development review of applications for infill development between the various City departments and regional-serving agencies to coordinate and maximize non-vehicular connections within the proposed developments and connecting to other areas of the City.*

Policy LU-2.3: Provide direct pedestrian connections between development projects where possible.

Implementation Action: *Establish procedures that allow City staff, during their review of infill development applications, to require pedestrian access studies to ensure that each development has maximized convenient and safe pedestrian connections to existing surrounding developments and public rights-of-way.*

Policy LU-2.4: Promote complementary infill development, rehabilitation, and re-use that contributes positively to the surrounding residential neighborhood areas.

Implementation Action: *Develop guidelines or standards that are specific to potential infill development sites to ensure that developers have considered the individual needs of the community and unique characteristics of the aesthetics, particularly those lots identified within each of the specific Mixed Use designations.*

Goal LU-3: Encourage sustainable development patterns that link transportation improvements and planned growth, create a healthy balance of jobs and housing, and protect the natural environment.

Policy LU-3.2: Encourage a mix of retail, service, industrial and manufacturing, and professional uses that creates diverse, well-paying employment opportunities.

Implementation Action: Focus economic development initiatives on infill sites and on businesses that can provide a range of employment opportunities for skilled and professional workers.

Policy LU-3.3: Locate regionally serving land uses with immediate access to the regional transportation network that is designed to provide maximum access capabilities and permit maximum dispersal of traffic.

Implementation Action: Review and modify, as necessary, zoning designations along Foothill Boulevard and I-15 for consistency with General Plan land use designations.

Policy LU-3.4: Promote development that is sustainable in its use of land and that limits impacts to natural resources, energy, and air and water quality.

Implementation Action: Adopt a sustainable development program that incorporates green building standards.

Policy LU-3.6: Create focused, pedestrian-friendly neighborhoods that are reminiscent of the qualities found in earlier days, particularly within the original communities of Cucamonga, Alta Loma, and Etiwanda, and along Historic Route 66 (Foothill Boulevard).

Implementation Action: Continue to identify, prioritize, and install streetscape and landscape amenities that provide pleasant and comfortable streets, enhance City identity, and promote walking.

Policy LU-3.8: Implement land use patterns and policies that incorporate smart growth practices, including placement of higher densities near transit centers and along transit corridors, allowing mixed-use development, and encouraging and accommodating pedestrian movement.

Implementation Action: Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.

Goal LU-4: Establish a pedestrian-friendly Foothill Boulevard corridor that facilitates transit use and provides a range of commercial destinations to serve both local and regional needs.

Policy LU-4.1: Provide new mixed-use development opportunities along the Foothill Boulevard Corridor to allow residential, commercial, and civic uses, and to accommodate both transit and automobiles.

Implementation Action: Review and modify the Foothill Boulevard Specific Plan to ensure that allowable land uses not only provide for, but encourage, a mix of residential, commercial, and civic uses that target all modes of transportation.

Policy LU-4.2: Concentrate community- and regional-serving uses on Foothill Boulevard (east of Haven Avenue), providing a range of commercial, office, residential, restaurant, and entertainment-related uses.

Implementation Action: Modify the Development Code as needed to ensure that zoning regulations allow the types of uses that would serve community and regional needs east of Haven Avenue.

Goal LU-5: Support a regionally serving office district that provides professional and technical employment opportunities for the Inland Empire.

Policy LU-5.4: Promote a pedestrian-friendly corridor where employees can walk to restaurants, commercial services, and other amenities in the area.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.5: Require development to provide courtyards and plazas, public art, and landscaped open spaces that promote safe and convenient pedestrian movement with continuous landscaped pathways between buildings and along Haven Avenue.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.6: Support the integration of transportation facilities, including transit, to support the office environment.

Implementation Action: *Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project.*

Goal LU-9: Foster a cohesive, healthy community through appropriate patterns and scales of development, including complementary transitions between districts, neighborhoods, and land uses.

Policy LU-9.5: Establish mixed-use areas as higher intensity “urban centers” where there is sensitive integration of land uses, convenient modes of transportation, and a focused “sense of place” that emanates from the architectural and landscape design.

Implementation Action: *Review and modify the Design Guidelines to include principles for development within the Mixed Use designations.*

Goal LU-10: Encourage sustainable landscaping and streetscape design.

Policy LU-10.1: Continue to require implementation of the City’s Water Efficient Ordinance, which should be reviewed and updated periodically.

Implementation Action: *Review and modify the regulations for the City’s Water Efficiency Ordinance as industry standards evolve. In particular, implement the provisions of AB 1881 regarding water-efficient landscaping.*

Policy LU-10.3: Promote low water usage, and emphasize fire-safe defensible space.

Implementation Action: *Develop a listing of acceptable fire-resistant plant types to be incorporated into new and rehabilitated development sites.*

Goal LU-12: Foster a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga.

Policy LU-12.3: Support development projects that are designed to facilitate convenient access for pedestrians, bicycles, transit, and automobiles.

Implementation Action: *Adopt a sustainable development program that incorporates green building standards.*

Goal CM-1: Provide an integrated and balanced multi-modal transportation network of complete streets to meet the needs of all users and transportation modes.

Policy CM-1.5: Implement street design standards. Modified standards may be applied where appropriate on arterial corridors relating to transit, bicycle facilities, sidewalks, and on-street parking to be context sensitive to adjacent land uses and districts, and to all roadway users, including transit, bicycles, and pedestrians.

Implementation Action: *Integrate into the CIP process the planning of modified standards for Foothill Boulevard to accommodate bus rapid transit (BRT) and for other arterials as appropriate to reflect the bikeway plan and pedestrian improvements necessary to support mixed-use districts.*

Goal CM-2: Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.

Policy CM-2.1: Facilitate bicycling and walking citywide.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Chapter components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.*

Policy CM-2.2: Encourage all feasible measures to reduce total vehicle miles traveled by automobiles, including enhanced transit access and land use approaches that provide compact and focused development along major transit corridors.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined. Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future. Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project. Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Chapter components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.*

Policy CM-2.3: Support the use of hybrid, electric, and low/zero emission vehicles.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.4: Replace City vehicles with energy-efficient and alternative fuel source models when replacing vehicles or adding to the City's fleet.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.5: Establish priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles.

Implementation Action: Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.6: Accommodate charging and fueling stations for alternative fuel vehicles, and put forth strong efforts to have charging facilities provided at employment centers.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities. Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.7: Require new developments of more than 100 employees (per building or per tenant/company) to develop Transportation Demand Management programs to minimize automobile trips and to encourage use of transit, ridesharing, bicycling, and walking.

Implementation Action: Consider expanding §17.10.070 Trip Reduction of the Development Code to include additional Transportation Demand Management programs.

Policy CM-2.8: Support the installation of high-speed communications infrastructure to facilitate the ability of residents to work at home.

Implementation Action: Continue to implement Title 7 Telecommunications Regulations of the Municipal Code.

Goal CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.

Policy CM-3.1: Consult with regional transit operators to maintain and improve the coverage and frequency of transit service in the City.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.

Policy CM-3.2: Support Omnitrans' expansion of Bus Rapid Transit (BRT) into Rancho Cucamonga, along Foothill Boulevard, with stops at all major north-south streets, and with direct routing via Victoria Gardens.

Implementation Action: Proactively engage with Omnitrans to identify the timing of BRT service, preferred BRT stops within the City, and necessary local infrastructure improvements needed to accommodate BRT service. Develop a time frame and development requirements so that development projects at affected locations can incorporate needed improvements along planned BRT routes. Work with Omnitrans to develop station designs, lighting, and station amenities that are compatible with Rancho Cucamonga's design character.

Policy CM-3.3: Provide local transit circulator service in the City, to serve local neighborhoods, Victoria Gardens, the Metrolink Station, the Civic Center, Central Park, and key destinations.

Implementation Action: Study the feasibility of establishing a local transit circulator to connect businesses, adjacent development, and activity centers in the City. Explore options for alternative funding from sources other than the General Fund, such as having merchants sponsor the shuttle. These buses should operate on fixed routes (with possibly some minimal real-time deviation) and on regular and convenient schedules. The service could be based on smaller (20-35 seat) buses. This action to include the following:

Conduct a Transit Planning Study

Study to determine the best approach to initiating local transit service, to develop a Short-Range (Five Year) Transit Plan for operating such a service, and to determine funding sources.

Explore the Feasibility of Extending Local Transit Service

Explore the possibility of extending to adjacent jurisdictions in cooperation with such jurisdictions who could also participate in funding, if beneficial to the City.

Work with Regional Transit Operators (Omnitrans)

Develop the optimum coordination and integration of bus transit services between the local City circulator system and the regional service.

Policy CM-3.4: Consult with Omnitrans to establish and maintain transit hubs at Victoria Gardens, Chaffey College, the Metrolink Station, and other locations as appropriate to facilitate use of transit and transfers between transit services.

Implementation Action: *Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.*

Policy CM-3.5: Consider and evaluate the relocation of Metrolink Station to Haven Avenue to provide improved connections to transit and to support planned transit-oriented land uses along Haven Avenue.

Implementation Action: *Work with Metrolink and SCRRA to study the feasibility of moving the Metrolink Station from its current location to Haven Avenue. Explore options for alternative funding from sources other than the General Fund, such as grants, and specifically grants that promote transit-oriented development.*

Policy CM-3.6: In addition to requiring private development to provide transit amenities, consult with regional transit operators to provide attractive and convenient bus stops, including shade/weather protection, seats, transit information, and bus shelters as appropriate.

Implementation Action: *Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit*

passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel. Develop a program, with identified funding sources, for providing amenities at bus stops in the City.

Policy CM-3.7: Continue to develop and maintain a citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets, to provide connections between neighborhoods, schools, parks, civic center/facilities, recreational facilities, and major commercial centers.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.8: Continue to encourage the provision of bicycle facilities, such as bicycle lockers and secure bike parking, throughout the City.

Implementation Action: *Identify existing locations where bicycle lockers and secure bicycle parking could be provided at key locations through put the City, and develop a funding and implementation plan. Encourage/require the provision of bicycle lockers and secure bike parking for major development projects, as defined in the Development Code. Modify the Development Code to require provision of bicycle parking spaces, bicycle lockers, and, as appropriate, showers for bicycle riders at new buildings providing significant employment, at transit stations, in the commercial districts, and at recreational destinations in the City.*

Policy CM-3.9: Identify and implement a dedicated funding source for implementation and completion of the bicycle network as identified in the Bicycle Plan.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those*

arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.10: Continue to complete the installation of sidewalks and require new development to provide sidewalks.

Implementation Action: Use the CIP to identify a schedule for installing new and replacement sidewalks throughout the City, placing priority on installing missing sidewalks near schools and activity centers, and replacing sidewalks that have been identified as hazardous to public safety.

Policy CM-3.11: Continue to require pedestrian amenities on sidewalks on major streets that are key pedestrian routes, including the provision of benches, shade trees, and trash cans.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-3.12: Continue to require that the siting and architectural design of new development promotes safety, pedestrian-friendly design, and access to transit facilities.

Implementation Action: Develop standards to be applied to development projects along transit corridors that require transit and pedestrian accessibility.

Policy CM-3.13: Establish a number of bike hubs in the City (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit nodes and at commercial nodes.

Implementation Action: Conduct a study to determine the best locations for bike hubs in the City, and develop a plan, wayfinding program, and implementation process for providing bike hubs that provide secure bicycle lockers, bike racks, and connections to transit at key locations in the City.

Policy CM-3.14: Enhance pedestrian and bicycle access to local and regional transit, including facilitating connections to transit.

Implementation Action: Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized

categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.15: Coordinate the provision of the non-motorized networks (bicycle and pedestrian) with adjacent jurisdictions to maximize sub-regional connectivity.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.16: Establish fixed route local circulator bus service connecting major activity centers.

Implementation Action: *Explore development of a fixed route local circulator bus system, station location, and funding mechanisms.*

Goal CM-4: Maximize the operational efficiency of the street system.

Policy CM-4.1: Continue to implement traffic management and traffic signal operation measures along the arterial roadway to minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.*

Policy CM-4.2: Continue to design and operate arterials and intersections for the safe operation of all modes of transportation, including transit, bicyclists, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with*

the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.3: Continue to implement Intelligent Transportation System (ITS) measures and advanced traffic management technologies where appropriate.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Goal CM-5: Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.

Policy CM-5.3: Require that new and substantially renovated office, retail, industrial, and multi-unit developments implement transit amenities, including bus turnouts, transit shelters, and other streetscape elements, as appropriate.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-5.4: Require that new and substantially renovated office, retail, industrial, institutional and multi-unit developments include bicycle and pedestrian amenities on site and/or in the vicinity of the development to facilitate bicycling and walking, including on-site bike paths where appropriate, secure off-street bicycle parking, sidewalk improvements, and benches. The City will encourage such developments to provide bicycle facilities including showers and changing rooms.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Goal ED-4: Implement consistent high-quality standards for all future development.

Policy ED-4.2: Make green building and green business a priority.

Implementation Action: Same action(s) as identified for LU-7.1 to 7.4.

Goal CS-6: Provide a safe, comprehensive network of interconnecting off-road trails with amenities that connect neighborhoods, parks, schools, open space, employment areas, retail services, other activity areas, and areas outside the City.

Policy CS-6.1: Provide a comprehensive, interconnected off-road trail system that provides alternative mobility choices throughout the entire City and increases connectivity.

Implementation Action: Continue to implement the principles of the Trails Implementation Plan.

Goal RC-2: Provide adequate, reliable, and sustainable water supplies to the community.

Policy RC-2.2: Continue to consult with the Cucamonga Valley Water District and support programs that protect water quality, conserve water usage, and promote re-use of water in accordance with State guidelines.

Implementation Action: Continue to consult with the CVWD on meeting targets for water recycling and conservation.

Goal RC-3: Support the use of water that is both efficiently consumed and recycled to minimize waste and maximize supplies.

Policy RC-3.1: Require the use of cost-effective methods to conserve water in new developments, and promote appropriate water conservation and efficiency measures for existing businesses and residences.

Implementation Action: Develop educational materials detailing the City's requirements for water conservation within new development proposals and tips for end-users to employ better practices for water conservation.

Policy RC-3.2: Encourage the conversion of water-intensive turf/landscape areas to landscaping that uses climate-appropriate plants, efficient irrigation systems, and water efficient site maintenance.

Implementation Action: Continually update the Water Efficiency Ordinance to meet current State requirements as necessary.

Policy RC-3.3: Support efforts to expand the recycled water distribution system and actively promote the widespread use of recycled water in Rancho Cucamonga.

Continue to consult with the CVWD on meeting targets for water recycling and conservation.

Policy RC-3.4: Maximize water efficiency and the use of alternative sources of water in City operations, and develop water-related best practices and model programs.

Implementation Action: Continue with City efficiency programs to conserve water and lead by example.

Goal RC-4: Encourage the use of energy resources that are efficiently expended and obtained from diverse and sustainable sources, in an effort to minimize greenhouse gas and other air emissions.

Policy RC-4.1: Pursue efforts to reduce energy consumption through appropriate energy conservation and efficiency measures throughout all segments of the community.

Implementation Action: *As it becomes economically practical, identify sources and replace imported, non-renewable energy resources with domestic renewable energy sources such as solar and wind energy, recycled municipal solid waste, and green waste.*

Policy RC-4.2: Promote the use of renewable energy and alternative energy technology, and support efforts to develop small-scale, distributed energy generation (e.g. solar, wind, cogeneration, and biomass) to reduce the amount of electricity drawn from the regional power grid and reduce the use of natural gas, while providing Rancho Cucamonga with a greater degree of energy and economic self-sufficiency.

Implementation Action: *Provided that there would not be a decline in services to City residents or undue tax burden, use of energy efficiency and renewable energy resources will be employed for approving capital and operational expenditures.*

Policy RC-4.3: Encourage the use of solar energy systems in homes and commercial businesses.

Implementation Action: *Establish design criteria for active and passive solar applications within development proposals.*

Policy RC-4.4: Reduce operational energy requirements through sustainable and complementary land use and circulation planning. Support implementation of State mandates regarding energy consumption and greenhouse gas reduction, including AB32 and SB375.

Implementation Action: *Promote land use and circulation patterns that result in multi-purpose automobile trips and that facilitate the use of local and regional transit; continue to advance land use patterns that provide employment and housing opportunities for City residents in a manner that allows for practical options for mobility other than by automobile.*

Policy RC-4.5: Support the development of private sources of sustainable and environmentally friendly energy supplies, provided these are consistent with City aesthetic and public safety goals.

Implementation Action: *Continue to make the recruitment and retention of “green” industries a priority in conjunction with economic development strategies.*

Goal RC-5: Encourage the use of energy conservation strategies in City projects and operations to maximize energy efficiency and serve as a role model to the community and the region.

Policy RC-5.1: Serve as a role model by adopting recognizable standards and incorporating the use of sustainable strategies for new and existing public buildings that maximize occupant health and productivity, minimize operating costs, and provide good environmental stewardship.

Implementation Action: *Collaborate and educate City departments on sustainable strategies that can be employed in new and existing public buildings.*

Policy RC-5.2: Investigate the feasibility of using solar (photovoltaic) lights for City operated parking lots instead of conventional street and pedestrian lights that are powered by electricity in an effort to conserve energy.

Implementation Action: *Establish a retrofit program as photovoltaic street lighting becomes more cost-effective than other technologies.*

Policy RC-5.3: Explore and consider the costs and benefits of alternative fuel vehicles including hybrid, electric, natural gas, and hydrogen powered vehicles when purchasing new City vehicles.

Implementation Action: *Continue to meet the objective of reducing fuel consumption when negotiating for new or replacements to the City's fleet vehicles.*

Goal RC-6: *Encourage and support green buildings in Rancho Cucamonga.*

Policy RC-6.1: Add energy efficiency standards in the Rancho Cucamonga Municipal Code based on green building principles, to reduce energy consumption (particularly for heating, cooling, and lighting) in new construction.

Implementation Action: *Adopt a formal green building program or create one based on a national model, such as LEED, GreenPoint Rated, and/or other programs into the City's codes.*

Policy RC-6.2: Encourage green practices for new and existing buildings throughout the community.

Implementation Action: *Provide developer incentives for constructing green buildings.*

Policy RC-6.3: Promote energy-efficient design features, including but not limited to appropriate site orientation, use of light-colored roofing and building materials, and use of evergreen trees and wind-break trees to reduce fuel consumption for heating and cooling beyond the minimum requirements of Title 24 State Energy Codes.

Implementation Action: *Review and update the City's design guidelines to address energy-efficient design features.*

Policy RC-6.4: Promote green practices and the use of energy saving designs and devices for new and existing buildings throughout the community. Consult with energy providers such as Southern California Edison, Southern California Gas, the Rancho Cucamonga Municipal Utility, and others to establish and coordinate energy efficiency programs that promote energy efficient design in all projects and assist residential, commercial, and industrial users.

Implementation Action: *During the development review process for larger development projects (greater than 10 units/or 10,000 square feet), coordinate with energy providers to determine if additional energy efficiency measures can be incorporated into a project design.*

Goal PF-7: Minimize the volume of solid waste that enters regional landfills and encourage recycling.

Policy PF-7.1: Continue to adopt programs and practices that minimize the amount of materials entering the waste stream. Encourage recycling and composting in all sectors of the community, including recycling of construction and demolition materials, in order to divert items from entering landfills.

Implementation Action: Continue with aggressive waste reduction programs to comply with the provisions of State law.

Policy PF-7.3: Embrace the sustainability principle that recognizes and takes advantage of the life cycle of goods and materials.

Implementation Action: Continue to maintain the Green Matrix and coordinate City personnel responsible for City purchasing and operations to choose goods and materials that are environmentally sustainable and cost effective.

Policy PF-7.4: Serve as a role model to businesses and institutions regarding practices and procedures that minimize the generation of solid waste.

Implementation Action: Provide awareness bulletins to the City residents and businesses on programs that the City is implementing in-house to reduce, recycle, and reuse.

Policy PF-7.5: Continue to educate the community regarding the benefits of solid waste diversion, recycling and composting, and maintain programs that make it easy for all people in Rancho Cucamonga to work toward and achieve City waste reduction objectives.

Implementation Action: Continue to promote local recycling of wastes and use of recycled materials by implementing provisions of AB 939 and adopting incentives, regulations, and procedures to specify local recycling requirements.

Goal PS-11: Reduce the volume of pollutants generated by motorized vehicles.

Policy PS-11-1: Implement the policies in the Community Mobility Chapter to foster a healthy and sustainable community and promote transportation choices other than the private automobile.

Implementation Action: Add the intersection improvements listed below to the Capital Improvement Program (CIP) or appropriate equivalents identified and approved by the City Engineer in the future that would offset the identified impacts; implement the improvements as funding becomes available. Prepare a report on the need for the improvements and their relationship to the impacts caused by new development in Rancho Cucamonga.

- Work with Caltrans and SANBAG to implement a new freeway interchange at 1-15 and Arrow Highway.
- Complete Wilson Avenue between Milliken Avenue and Day Creek Boulevard.
- Complete Rochester Avenue between Banyan Street and Wilson Avenue.

- *Pursue Federal funds for a grade separation of the SPRR at Etiwanda Avenue.*
- *Complete storm drain and widening of Hellman Avenue from Foothill Boulevard to Cucamonga Creek.*
- *Complete Wilson Avenue from East Avenue to Wardman Bullock.*
- *Improve the Base Line Road at I-15 Freeway Interchange.*
- *Complete Youngs Canyon from Cherry Avenue to Banyan Street.*
- *Continue to program funding into the CIP for the improvements to deficient equestrian trails, as outlined in the Trails Implementation Plan.*

Policy PS-11.2: Minimize vehicle emissions by encouraging alternative land use patterns that reduce the need for automobile trips.

Implementation Action: *Provide incentives for development proposals that incorporate transit, connectivity, and a mix of land uses within the planning area.*

Policy PS-11.3: Support programs that increase ridesharing, reduce pollutants generated by vehicle use, and meet the transportation control measures recommended by SCAQMD in the most recent Clean Air Plan.

Implementation Action: *Coordinate with the Chamber to provide educational materials and incentives for businesses that engage in carpooling, transit, flexible work schedules, etc. to reduce the use of individual vehicles.*

Policy PS-11.4: Support regional and local transportation and housing programs that reduce vehicle emissions by decreasing vehicle miles traveled (VMT).

Implementation Action: *Continue to require development proposal compliance with the City's adopted TDM ordinance.*

Policy PS-11.6: Pursue strategies and capital improvements that allow safe routes for children to walk or bike to school to reduce the need for automobile trips.

Implementation Action: *Collaborate with local school district representatives to identify barriers to children walking or bicycling to school, particularly physical improvements that are needed, and jointly apply for funding to complete CIP projects that would resolve these barriers.*

Goal PS-12: Mitigate against climate change.

Policy PS-12.1: Consult with State agencies, SCAG, and San Bernardino Associated Governments (SANBAG) to implement AB32 and SB375 by utilizing incentives to facilitate infill and transit-oriented development.

Implementation Action: *Assign dedicated staff to seek grants to assist with infill projects and to monitor City compliance with the provisions of SB375.*

Policy PS-12.2: Encourage renewable energy installation, and facilitate green technology and business and a reduction in community-wide energy consumption.

Implementation Action: As it becomes economically practical, identify sources and replace imported, non-renewable energy resources with domestic renewable energy sources such as solar and wind energy, recycled municipal solid waste, and green waste. Continue to make the recruitment and retention of “green” industries a priority in conjunction with economic development strategies.

Policy PS-12.3: Encourage development of transit-oriented and infill development, and encourage a mix of uses that foster walking and alternative transportation.

Implementation Action: Promote land use and circulation patterns that result in multi-purpose automobile trips and that facilitate the use of local and regional transit; continue to advance land use patterns that provide employment and housing opportunities for City residents in a manner that allows for practical options for mobility other than by automobile.

Policy PS-12.4: Provide enhanced bicycling and walking infrastructure, and support public transit, including public bus service, the Metrolink, and the potential for Bus Rapid Transit (BRT).

Implementation Action: Promote land use and circulation patterns that result in multi-purpose automobile trips and that facilitate the use of local and regional transit; continue to advance land use patterns that provide employment and housing opportunities for City residents in a manner that allows for practical options for mobility other than by automobile.

Policy PS-12.5: Provide green building incentives, assess green building techniques as a formal stage of project review, and develop a green building ordinance or program that addresses both new and existing buildings. Adaptation strategies will also include increased water efficiency in buildings.

Implementation Action: Adopt a formal green building program or create one based on a national model, such as LEED, GreenPoint Rated, and/or other programs into the City’s codes. Provide developer incentives for constructing green buildings. Review and update the City’s design guidelines to address energy-efficient design features. During the development review process for larger development projects (greater than 10 units/or 10,000 square feet), coordinate with energy providers to determine if additional energy efficiency measures can be incorporated into a project design.

Policy PS-12.6: Encourage efforts to reduce waste generation and re-use and support increased recycling and composting opportunities with a focus on large commercial and industrial waste producers.

Implementation Action: Continue with aggressive waste reduction programs to comply with the provisions of State law.

Policy PS-12.7: Support tree planting, planting more vegetation (including native and drought-resistant planting), and preservation of open space.

Implementation Action: Continue to consult with agencies and private organizations that have the land or other resources available to promote open space and habitat preservation and restoration. Pursue actions that provide appropriate long-term protection of areas within the City’s Sphere of Influence that contain sensitive habitat, and which are considered of unique value in enhancing the quality of the local

environment. Require development proposals that include riparian or water-related communities to prepare a site-specific investigation to define the extent and fragility of the riparian community, determine wetland permit requirements and propose measures to mitigate any impacts on the resources stemming from land disturbance or other site development. Continue working with the County of San Bernardino, California Department of Fish and Game, and U.S. Fish and Wildlife Service to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains. Continue with the acquisition program or the creation of conservation easements to protect the biological integrity of the alluvial fan sage scrub (AFSS) to create a preserve for use as part of a mitigation land bank. Explore the feasibility and costs/benefits of potential programs to promote the proper care of and/or preservation of large, mature trees on private property, including incentives. Consider adoption of a tree ordinance. Continue to coordinate the development review process, building permit process, and inspections with the Fire District to ensure that the greatest measures to protect from fire hazards in or adjacent to open space are employed.

Policy PS-12.8: Develop green procurement plans and ensure energy savings in City operations and maintenance.

Implementation Action: Collaborate and educate City departments on sustainable strategies that can be employed in new and existing public buildings. Establish a retrofit program as photovoltaic street lighting becomes more cost-effective than other technologies. Continue to meet the objective of reducing fuel consumption when negotiating for new or replacements to the City's fleet vehicles.

Policy PS-12.9: Develop energy- or climate change-themed publications and workshops, facilitating energy audits for residents, and establishing partnerships to reduce greenhouse gas emissions. Increase public awareness about climate change, and encourage residents and businesses to become involved in activities and lifestyle changes that help reduce greenhouse gas emissions.

Implementation Action: Collaborate and educate City departments on sustainable strategies that can be employed in new and existing public buildings.

4.5.5 STANDARD CONDITIONS OF APPROVAL

SC 4.5-1 The City of Rancho Cucamonga shall actively participate in the development of the Sustainable Communities Strategy (SCS) within San Bernardino County, being prepared by SANBAG pursuant to SB 375, and agree to comply with the requirements of the SCS, including preparation of a Climate Action Plan for the City.

SC 4.5-2 The City of Rancho Cucamonga adopted Ordinance No. 823 (Chapter 17.42 of the Municipal Code), Water Efficient Landscaping in December 2009. This ordinance, following the requirements of AB 1881, was developed to improve both water conservation and water retention. Methods include but are not limited to (1) maximizing the use of recycled water and other water conserving technology, (2) promoting the use of low water use plants, (3) designing and managing landscapes so that water demand can be decreased, and (4) promoting public education about water conservation and efficient water management.

SC 4.5-3 The City has adopted and is implementing the Green Team Sustainability Action Matrix. This program is applicable to the City's Municipal Operations and demonstrates the City's direction towards sustainability. Elements of the program that contribute to GHG emissions reduction include the following (Rancho Cucamonga 2010).

Climate Protection

- Complete and maintain tree inventory with goal of increasing amount of trees in city.
- Put City services, including permitting and class registration, online to minimize trips and paper.
- Prohibit wood-burning fireplaces in new development.

Green Buildings

- Develop a program, goals and timeline to move City operations towards net-zero and grid neutral.
- Explore LEED certification for future public buildings.
- Energy Efficient Appliances, Electrical, and Mechanical Equipment Program allows for permit fee waiver for installation of energy efficient appliances and other mechanical equipment and provides for green building certification for two inspectors. ARRA funded.
- Home Improvement Program Energy Efficiency Revolving Loan providing low-income residents with loans for energy efficient upgrades.

Energy

- Adopt a resolution requiring at least 20% of City energy electricity purchases to be renewable by 2010 and 33% by 2020.
- Retrofit city red traffic signal lights with LEDs.
- Retrofit green and yellow city traffic signal lights with LEDs as replacements are needed.
- Design all new City buildings to maximize cost-effective energy efficiency.
- Retrofit all City facilities with energy-efficient lighting and lighting controls.
- Complete an HVAC Comprehensive Study to ensure facilities' HVAC systems run at maximum efficiency. As part of this effort, replace large City building pumps and electric motors with "variable speed drives" which respond to demand, and modernize the Civic Center's system to replace the old and inefficient compressors.
- Offer RCMU customers energy audits of their facilities.
- Offer RCMU customers rebates for lighting retrofits, HVAC tune-up, and solar installations.
- Replace gas-powered grounds maintenance mowers with electric whenever possible.

- Retrofit park lighting with efficient fixtures.
- Generate a baseline of City energy usage and cost; develop a plan, including goals and a timeline, to maximize energy efficiency and the use of cost-effective alternate sources of energy.
- Explore additional opportunities for the use of renewable energy sources, including solar electricity, solar hot water and wind, especially near the Cajon Pass.
- Research energy efficiency of City street lights (solar and LED).
- Monitor developing energy efficiency technologies, including LEDs for lighting and new solar systems.

Water

- Install a computerized irrigation control system to manage irrigation on over 400 individual parks and landscaped parkways.
- Amend code to allow use of artificial turf and encourage use at city facilities where appropriate.
- Test high efficiency urinals, toilets and other fixtures and install those that are viable in all City facilities

Waste Management

- Reduce amount of paper waste. Reduce number of agenda packets produced. Post financial documents online. Transition to electronic format for City Manager's Weekly.
- Enact an ordinance requiring construction and demolition projects to divert 50% of waste. Require permittees to pay a diversion deposit.
- Provide residents with three collection containers (recyclables, green waste, and trash). Provide programs for businesses, multi-unit residences, and school programs to meet the needs of the facilities.

Transportation

- Implement 4/10 work schedule to reduce employee driving.
- Install electric vehicle charging stations (The City installed 21 electric vehicle charging stations in high traffic City facilities and parks, including the Civic Center and the Metrolink Train Station.)
- Replace gas-powered utility carts with electric carts (15 replaced so far).
- Replace City vehicles with new energy and/or fuel efficient models such as hybrid electric vehicles when replacing vehicles or increasing the City's fleet (City has 6 hybrids, and plans to acquire 22 more).
- Replace diesel-powered vehicles with Compressed Natural Gas (CNG) vehicles, including street sweepers, dump trucks, heavy trucks, fire equipment, and tractors. (Anticipates all to be replaced by 2020).
- Build a CNG fueling station to serve the new Green fleet. Explore options of extending access to other public agencies and public.

- Utilize automatic vehicle locator (AVL) technology to optimize City vehicle routing.
- Expand the partnerships with all local and regional transit and transportation agencies and other organizations to maintain and enhance local transportation options.
- Partner with local transit agencies to promote use of public transportation.
- Explore employee bicycling programs.
- Explore providing shuttle linking hotels, commercial centers and civic center.
- Provide carpool and explore vanpool opportunities for City employees.

Procurement

- Use of online/electronic procurement
- Fleet optimization: assisting Fleet to procure vehicles that includes providing gas efficient vehicles, replacing vehicles when needed, etc.
- When opportunities arise, reconfigure office space to create better working environments, i.e., views and natural light.
- Electronic bidding to reduce paper.
- Develop a policy to only purchase Energy Star-rated or higher energy-efficient equipment.

Education

- Educate all City Employees on current and future sustainability policies.
- Promote the City's green efforts to the community and other stakeholders.
- Facilitate partnerships with the city's businesses to encourage the implementation of green practices.
- Explore all appropriate partnerships with public agencies, school districts, utility companies, and other organizations in order to maximize sustainability education initiatives (essential partners).
- Report annually on the status of the Sustainability Action Plan.
- Develop a Recognition Program to honor local businesses and others who practice sustainability initiatives.
- Take advantage of City events to promote sustainability.

4.5.6 ENVIRONMENTAL IMPACTS

Greenhouse Gas Emissions

Threshold 4.5a: Would implementation of the proposed General Plan Update Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Specifically, would implementation of the proposed General Plan Update result in

a net increase of GHG emissions of 100,000 MTCO₂e per year or more?

Construction (Short-term) GHG Emissions

The proposed 2010 General Plan Update does not directly involve construction activity. However, GHG emissions would result from construction activities associated with long-term implementation of land use policies in the proposed 2010 General Plan Update. The primary source of GHG emissions generated by construction activities is from use of diesel-powered construction equipment and other combustion sources (i.e., generators, worker vehicles, materials delivery, etc.). The GHG emitted by construction equipment is primarily carbon dioxide (CO₂). In general, site preparation including demolition, grading and excavation represent the construction activities that would result in the highest levels of GHG emissions. GHGs would not only be emitted by on-site construction equipment but also from off-site haul trucks and construction workers traveling to and from the site.

Typical emission rates for construction equipment, including CO₂, can be obtained from the Urban Emissions Model Version (URBEMIS), released by CARB. URBEMIS is a computer program that can be used to estimate emissions including operation (vehicle and area) sources and construction activities associated with land development projects in California.

At this programmatic level of analysis, project- specific construction information is not known because specific projects are not proposed as part of the 2010 General Plan Update. Therefore, total construction emissions related with implementation of the 2010 General Plan Update cannot be quantified. Construction GHG emissions would be evaluated on a project-by-project basis during application review and evaluation for those projects subject to CEQA.

Long-term GHG Emissions

Methodology

The GHG emissions associated with the proposed 2010 General Plan Update were calculated using the URBEMIS program described above. URBEMIS was set to calculate vehicle, natural gas, hearth, and emissions for the entire proposed 2010 General Plan Update under the Target Density scenario, as detailed in Section 3.0, Project Description. Default URBEMIS variables were used for the calculations, including trip generation rates. URBEMIS calculates annual average emissions in tons per year, which are then converted to metric tons per year. The land uses, in terms of dwelling units and square footages, as well as default emission factors utilized in calculating the emissions are provided in the appendix of the GHG Assessment (Appendix D of this PIER).

GHG emissions resulting from residential electrical energy use were calculated by using the energy intensity data, 7,300 kilowatt hours per year (kWh/yr) per residential household, from the July 29, 2009, SCAQMD Working Group presentation (SCAQMD 2009). Non-residential energy intensity data were taken from a study published by the California Energy Commission, with data specific to Southern California Edison use (CEC 2006a). GHG emissions are associated with energy embodied in water demand. Water is embodied with energy by virtue of the amount of energy consumed in collecting, extracting, conveying, treating, and distributing water to end users, and in treating and disposing of wastewater. Water use data of 110,000 gallons of water per year per household and 123 gallons per year per square foot for non-residential uses were taken from the July 29, 2009, SCAQMD Working Group presentation (SCAQMD 2009). Data from the California Energy Commission (CEC) indicates that potable water delivered to Southern California has an embodied energy of 13,022 kilowatt-hours per million gallons (kWh/MG) when used indoors, (i.e., subsequently treated as wastewater) and 11,111 kWh/MG

when used outdoors (CEC 2006b). Electrical energy data were converted to GHG using emissions data from the CCAR General Reporting Protocol for CO₂ electricity use in California (CCAR 2009). GHG emissions attributed to solid waste transport, disposal were estimated using the USEPA Waste Reduction Model (WARM), version 10 (USEPA 2009) for mixed municipal solid waste. Calculations are shown in Appendix D.

GHG emissions estimates for all scenarios are based on existing or projected land uses and do not include emissions reductions attributable to the General Plan Goals and Policies or the Standard Conditions of Approval. Thus, the calculations reflect a “business-as-usual” (BAU) scenario, Emission reductions from BAU are addressed following the quantification of GHG emissions.

Analysis

The primary source of GHG emissions generated by the proposed project (i.e. proposed land uses with implementation of the 2010 General Plan Update) would be from motor vehicles. Other emissions would be generated from the combustion of natural gas for space and water heating, as well as off-site GHG emissions from the generation of electricity consumed by the proposed land use development over the long term.

Quantification of GHG Emissions

As noted above, the proposed project emissions were analyzed for the Target Density scenario, for buildout year 2030. For the purpose of comparison, the Existing Conditions/Baseline (2009) and Existing General Plan (2030) were both calculated, although the baseline emissions based on the existing conditions in the City are the basis of the CEQA analysis. These emissions estimates are presented in Table 4.5-2.

**TABLE 4.5-2
ESTIMATED GHG EMISSIONS**

Source	Annual CO2 Emissions					
	Existing 2009		Existing General Plan 2030		Proposed General Plan 2030	
	MTCO ₂ e	Percent	MTCO ₂ e	Percent	MTCO ₂ e	Percent
Residential Electricity	133,457	3.7%	132,922	3.4%	151,096	3.6%
Retail Electricity	58,153	1.6%	51,618	1.3%	63,263	1.5%
Office Electricity	83,767	2.3%	36,497	0.9%	77,511	1.9%
Industrial Electricity	266,330	7.4%	318,300	8.1%	307,383	7.4%
School Electricity	6,638	0.2%	7,406	0.2%	6,783	0.2%
Residential Water Consumption	24,266	0.7%	24,168	0.6%	27,473	0.7%
Commercial Water Consumption	47,667	1.3%	48,644	1.2%	52,493	1.3%
Residential Solid Waste Disposal	187,190	5.2%	186,440	4.7%	211,931	5.1%
Commercial Solid Waste Disposal	174,409	4.8%	177,983	4.5%	192,069	4.6%
Natural Gas, Hearth, and Landscape Maintenance	201,563	5.6%	213,457	5.4%	238,092	5.7%
Vehicle Trips	2,413,872	67.1%	2,749,625	69.7%	2,825,220	68.0%
TOTAL	3,597,312	100.0%	3,947,059	100.0%	4,153,315	100.0%
Increase over Existing 2009			349,748	9.7%	556,003	15.5%
Increase over Existing GP 2030					206,256	5.2%
MTCO ₂ e – Metric tons of carbon dioxide equivalent						
Source: MGA 2010; BonTerra Consulting 2010.						

As shown in Table 4.5-2, total GHG emissions are projected to be 3,597,312 MTCO₂e per year for the Existing Conditions/Baseline (2009), 3,957,059 MTCO₂e per year for the 2001 General Plan (2030), and 4,153,315 MTCO₂e per year for the proposed 2010 General Plan Update (2030). Implementation of the proposed 2010 General Plan Update would result in a net emission increase of 556,003 MTCO₂e per year when compared to the Existing Conditions/Baseline (2009), and 206,256 MTCO₂e per year when compared to the Existing General Plan (2030). Approximately 68 percent of the estimated GHG emissions associated with the proposed 2010 General Plan Update are projected to be from motor vehicles. Electricity consumption would account for approximately 15 percent of the GHG emissions. As shown, the proposed 2010 General Plan Update's total net increase in GHG emissions would exceed the 100,000 MT per year de minimis threshold that CARB has set for transportation projects and that has been applied to the proposed project.

The comment letter issued by the California Attorney General, on the Coyote Valley Specific Plan, identified the benchmark for causing a significant impact as follows: "Where a project's direct and indirect GHG-related effects, considered in the context of the existing and projected cumulative effects, may interfere with California's ability to achieve its GHG reduction requirements [as required by AB 32], the project's global warming-related impacts must be considered cumulatively significant." The estimated increase in emissions (556,003 MTCO₂e per year) in comparison to the applied threshold (100,000 MTCO₂e per year) available at this time indicates that GHG emissions related to buildout of the proposed 2010 General Plan Update would be considered significant.

GHG Emission Reductions

The 2010 General Plan Update goals, policies, and implementation plans (IP), and the Standard Conditions of Approval (SC) described above would and will result in reducing GHG emissions now and in future years. Because this analysis is at the citywide level, and the extent of the application of the IPs and SCs cannot be reasonably defined at this time, the quantity of GHG emission reductions cannot be quantified. However, the following examples provide indications of the potential reductions from the BAU GHG emissions shown in Table 4.5-2:

The proposed 2010 General Plan Update Goal LU-2 and Policies LU-2.1, LU-2.4, and CM-2.2 describe measures to increase densities, develop infill sites and encourage compact development. A 1999 simulation study conducted for the USEPA compared infill to "greenfield" development in three urban areas. The results predicted infill development would reduce daily VMT by 48 to 61 percent and CO₂ emissions by 45 to 50 percent (Allen et al 1999). A 2009 study of 85 scenarios in 23 planning studies from 18 metropolitan areas suggests that a typical compact land use-transportation scenario could, by 2050, produce 17 percent fewer VMT than trend conditions at the same population and employment levels, and that the estimate is probably conservative (Bartholomew and Ewing 2009)

An approach to quantifying GHG emission reduction measures has been developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and further refined by the San Joaquin Valley APCD (SJVAPCD). Both of these districts adopted their methodologies in December 2009.⁴ The methodology assigns a percent reduction to GHGs for specific measures in the following categories (SJVAPCD 2009):

- Bicycle/Pedestrian/Transit
- Parking

⁴ The South Coast AQMD has neither drafted nor adopted GHG emission reduction methodologies for residential and commercial projects.

- Site Design
- Building Component
- TDM and Miscellaneous

Both districts recognize that there are additional measures that need more research before determining a quantified reduction to add to the measures that have been adopted.

Table 4.5-3 shows a small sampling of the SJVAPCD GHG reduction measures that correspond to proposed 2010 General Plan Update Goals and Policies, and the percent GHG emission reduction that is credited to an analyzed project. On each project, these credits are summed, and the goal is to achieve a 15 percent reduction. The SJVAPCD measures are summarized for brevity in this PEIR; most measures have considerably more detail than shown in the table.

The proposed 2010 General Plan Update would result in a net increase of GHG emissions that would be considered cumulatively considerable and a significant and unavoidable impact, Adherence to identified SCs, 2010 General Plan Update goals and policies and MM 4.5-1 would further reduce GHG emissions; however, the reductions would not be sufficient to reduce emissions to below the 100,000 MTCO₂e threshold, and the impact would remain significant and unavoidable.

Implementation of MMs 4.5-2 and 4.5-3 have the potential to reduce the GHG emissions impacts of the proposed 2010 General Plan Update to a less than significant level by substituting the targets and actions of a CAP for the thresholds used in this analysis as well as encouraging additional energy efficiencies. However, completion and adoption of a CAP by the City or a higher level agency is somewhat speculative. Therefore, the GHG emissions impact of the proposed 2010 General Plan Update is considered significant and unavoidable.

Impact 4.5a: The proposed 2010 General Plan Update would result in an estimated gross increase of GHG emissions of 556,003 MTCO₂e per year. Implementation of SCs, the 2010 General Plan Update goals and policies, and MMs 4.5-1 through 4.5-3 would reduce the GHG emissions; however, emissions would not be reduced to less than the 100,000 MTCO₂e per year threshold. The impact would be significant and unavoidable.

**TABLE 4.5-3
EXAMPLE PROJECT-LEVEL GREENHOUSE GAS REDUCTION MEASURES**

Sample 2010 General Plan Update Policies	SJVAPCD Measure Description	GHG Emission Reduction (percent)
Bicycle/Pedestrian/Transit Measures		
CM-2.1, CM-3.4, CM-3.7, CM-3.8, CM-3.9, and CM-3.13 would develop and improve bicycle travel and bicycle facilities	Entire project is located adjacent to an existing Class I or Class II bike lane and project design includes a comparable network that connects the project uses to the existing offsite facility.	0.625
	Non-residential projects provide plentiful short-term and long-term bicycle parking facilities to meet peak season maximum demand.	0.625
	Non-residential projects provide "end-of-trip" facilities including showers, lockers, and changing space.	0.625
	Long-term bicycle parking is provided at apartment complexes or condominiums without garages.	0.625
LU-5.4, LU-5.5 Pedestrian networks; LU-12.3 Projects with convenient access	The project provides a pedestrian access network that internally links all uses and connects to existing external streets and pedestrian facilities.	1
LU-2.3, CM-2.1 Direct pedestrian connections	Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and nonresidential uses that impede bicycle or pedestrian circulation are eliminated.	1
CM-3.6 Bus shelters	Bus or Streetcar service provides headways of one hour or less for stops within 1/4 mile; project provides safe and convenient bicycle/pedestrian access to transit stop(s) and provides essential transit stop improvements (i.e., shelters, route information, benches, and lighting)	0.5
Site Design Measures		
LU-2.1, LU-3.8 High density along transit routes; CM-1.5, CM-3.2 develop BRT	Residential Density with Existing Bus Rapid Transit; 31-40 du/acre Project provides high-density residential development. Mitigation value is based on project density and proximity to existing bus rapid transit. Existing transit facilities must be within 1/4 mile of project border. Project provides safe and convenient bicycle/pedestrian access to all transit stop(s) within 1/4 mile of project border.	7
	Project is oriented towards existing transit, bicycle, or pedestrian corridor. Setback distance is minimized.	0.5
LU-3.2, LU-4.1, LU-4.2, LU-9.5 Enable Urban Mixed Use	Development of projects predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with functional inter-relationships and a coherent physical design.	From 3 to 9 dependent on job to housing ratio.
Building Component Measures		
RCs-4.1 through 4.4 promote renewable energy design	Project provides onsite renewable energy system(s).	1
RCs-6.1 through 6.4 promote energy efficient building design	Project Exceeds title 24 requirements by 20%	1
Measures not yet Quantified by SJVAPCD		
Measures related to indoor and outdoor water conservation have not been quantified by SJVAPCD. However, GHG emissions reductions may be estimated on the project level by consideration of the flow ratings and efficiency ratings of the systems. Similarly, solid waste reduction GHG emissions estimates may be made by estimating reductions in generation of solid waste.		
Measure descriptions and GHG emission reductions are taken from <i>Final Staff Report -Climate Change Action Plan: Addressing GHG Emissions Impacts under CEQA</i> (SJVAPCD December 17, 2009).		

Compatibility with Plans, Policies, and Regulations

Threshold 4.5b: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Table 4.5-4 lists many of CAPCOA’s model policies for GHGs in General Plans, as described above in Section 4.5-1. While not formal policies of a regulatory agency, these policies provide important and appropriate guidance on project compliance with State policies. For each policy, the right-hand column of the table shows the proposed 2010 General Plan Update policy or Standard Condition that responds to the measure.

As shown in Table 4.5-4, many of the proposed 2010 General Plan Update policies would be consistent with measures recommended by the CAPCOA to reduce GHG emissions, indicating that the proposed 2010 General Plan Update would not conflict with existing plans, policies and regulations adopted for the purpose of reducing GHG emissions.

Impact 4.5b: The proposed 2010 General Plan Update would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The impact would be less than significant.

**TABLE 4.5-4
CAPCOA MODEL POLICIES AND PROPOSED 2010 GENERAL PLAN
UPDATE POLICIES**

CAPCOA Model Policy	Rancho Cucamonga General Plan Policy (see Section 4.5.4)
Land Use and Urban Design	
LU-1.3 Infill	LU-2.1, LU-2.4, CM-2.2, PS-11.2, PS-12.1, PS-12.3
LU-1.5 Density	LU-2.1, LU-3.8, CM-2.2, PS-11.2
LU-1.8 Bicycle Facilities	CM-1.5, CM-2.1, CM-3.7, CM-3.8, PS-11.6, PS-12.4
LU-2.1 Mixed-Use Development	LU-2.1, LU-3.2, LU-3.8, LU-4.1, LU-4.2, LU-9.5, RC-4.4, PS-11.2, PS-12.3
LU-3.1 Transit-Supportive Density	LU-2.1, LU-2.2, LU-3.8, LU-4.1, LU-9.5, CM-2.2, RC-4.4, PS-11.2, PS-12.1, PS-12.3
LU-3.2 Transit-Oriented Development	LU-2.1, LU-2.2, LU-3.8, LU-4.1, LU-5.6, LU-9.5, LU-12.3, CM-2.2, CM-3.5, CM-3.12, CM-5.3, RC-4.4, PS-11.2, PS-12.1, PS-12.3
LU-3.4 Public Transit Development Focus	LU-2.1, LU-2.2, LU-3.8, LU-4.1, LU-5.6, LU-9.5, LU-12.3, CM-2.2, CM-3.5, CM-3.12, CM-5.3, RC-4.4, PS-11.2, PS-12.3
LU-3.5 City-centered Corridors	LU-3.8, LU-4.1, LU-4.2, CM-2.2, CM-3.5
LU-3.6 Transit-oriented Development Design Standards	LU-9.5, CM-3.12
LU-3.7 Affordable Housing	PS-11.4
LU-4.1 Pedestrian-oriented Character	LU-2.2, LU-2.3, LU-3.6, LU-3.8, LU-12.3, CM-1.5, CM-2.1, CM-3.10, CM-3.11, CM-3.12, CM-5.4, PS-11.1, PS-11.2, PS-12.3, PS-12.4
LU-4.2 Pedestrian Access	LU-2.2, LU-2.3, LU-3.8, LU-5.4, LU-5.5, LU-12.3, CM-1.5, CM-2.1, CM-3.10, CM-3.11, CM-3.12, CM-5.4, PS-11.1, PS-12.3, PS-12.4

**TABLE 4.5-4
CAPCOA MODEL POLICIES AND PROPOSED 2010 GENERAL PLAN
UPDATE POLICIES**

CAPCOA Model Policy	Rancho Cucamonga General Plan Policy (see Section 4.5.4)
Transportation	
TR-1.1 Transportation Planning	LU-12.3, CM-2.2, CM-3.12
TR-1.2 System Interconnectivity	LU-12.3, CM-1.5, CM-2.2, CM-3.4, CM-3.5, CM-3.10, CM-3.13, CM-3.14, PS-11.1, PS-12.4
TR-1.3 Transit System Infrastructure	CM-3.1, CM-3.2, CM-3.3, CM-3.4, CM-3.5, CM-3.6, PS-12.4
TR-1.4 Customer Service	CM-3.1, CM-3.4, CM-3.6
TR-1.5 Transit Funding	PS-12.4
TR-2.2 Arterial Traffic Management	CM-1.5, CM-3.2, CM-4.1, CM-4.2
TR-2.3 Signal Synchronization	CM-4.1, CM-4.2, CM-4.3
TR-3.1 Ride-Share Program	PS-11.3
TR-3.2 Employer-based Trip Reduction	CM-2.7, PS-11.3
TR-3.4 Local Area Shuttles	CM-3.3, CM-3.16
TR-3.5 Low- and No-Travel Employment Opportunities	CM-2.8, PS-11.3
TR-4.1 Development Standards for Bicycles	LU-12.3, CM-1.5, CM-2.1, CM-2.2, CM-3.7, CM-3.8, CM-3.12, CM-5.4, PS-11.6
TR-4.2 Bicycle and Pedestrian Trails	CM-2.1, CM-3.7, CS-6.1, PS-12.4
TR-4.4 Bicycle and Pedestrian Project Funding	CM-3.9, PS-12.4
TR-4.5 Bicycle Parking	CM-3.8, CM-5.4
TR-5.4 Electric/Alternative Fuel Vehicle Parking	CM-2.5, CM-2.6
TR-6.1 Low and Zero Emission Vehicles	CM-2.3, CM-2.4, CM-2.6
Energy Efficiency	
EE-1.1 Green Building Ordinance	RC-6.1, RC-6.3, PS-12.5
EE-1.2 Green Building Flexibility	RC-6.3, PS-12.5
EE-1.3 Green Building Barriers	LU-3.4, ED-4.2, RC-6.3, PS-12.5
EE-1.4 Green Building Incentives	LU-3.4, ED-4.2, RC-6.2, PS-12.5
EE-2.1 Improved Building Standards	CM-2.3, RC-6.1, RC-6.3
EE-3.1 Exterior Heat Gain	RC-6.3
EE-3.2 Heat Island Mitigation	RC-6.3
EE-4.1 Energy Audits	PS-12.9
EE-4.3 Community Energy Program	PS-12.9
Alternative Energy	
AE-1.1 Site Designation	RC-4.2, RC-4.5, PS-12.2
AE-1.2 Removing Barriers	PS-12.2
AE-1.3 Zoning Flexibility	PS-12.2
AE-2.2 Co-generation Projects	RC-4.2, RC-4.5, PS-12.2
AE-2.3 Green Utilities	RC-4.2, RC-4.5, PS-12.2
AE-4.1 Renewable Energy Incentives	RC-4.2, RC-4.5, PS-12.2
AE-4.3 Partnerships	RC-4.5
Municipal Operations	
MO-1.1 Energy Efficiency Plan	RC-5.1, RC-5.2, PS-12.8
MO-1.2 Efficiency Requirement for New Facilities	RC-5.1, PS-12.8

**TABLE 4.5-4
CAPCOA MODEL POLICIES AND PROPOSED 2010 GENERAL PLAN
UPDATE POLICIES**

CAPCOA Model Policy	Rancho Cucamonga General Plan Policy (see Section 4.5.4)
MO-2.1 Wastewater System Efficiency	RC-3.4
MO-2.2 Drinking Water System Efficiency	RC-3.4
MO-2.3 Fleet Replacement	CM-2.3, CM-2.4
MO-4.2 Renewable Energy Installation	RC-5.2
MO-6.1 Purchasing Practices	ED-4.2, PF-7.3, PS-12.8
MO-6.2 Contracting Practices	ED-4.2, PF-7.3, PS-12.8
<i>Waste Reduction and Diversion</i>	
WRD-2.2 Diversion Services	PF-7.1, PS-12.6
WRD-2.5 Program Promotion	PF-7.1, PF-7.3, PF-7.4, PF-7.5, PS-12.6
<i>Conservation and Open Space</i>	
COS-1.2 Water Conservation Plan	LU-10.1
COS-1.3 Recycled Water Use	LU-10.1, RC-2.2, RC-3.3
COS-2.1 Water-Efficient Design	RC-3.1
COS-2.2 Water-Efficient Infrastructure and Technology	RC-3.1
COS-2.3 Gray Water System Standards	RC-3.3
COS-3.1 Water-Efficient Landscapes	RC-3.2
COS-3.2 Shade Tree Planting	PS-12.7
COS-3.3 Urban Forestry Management	PS-12.7
COS-4.2 Conservation Area Preservation	PS-12.7
<i>Education and Outreach</i>	
EO-1.1 Outreach Methods	PS-12.9
EO-1.2 Outreach Topics	PS-12.9
EO-2.1 Energy Efficiency Campaigns	PS-12.9
EO-2.2 Pedestrian and Bicycle Promotion	PS-12.9
EO-3.1 Waste Reduction	PS-12.9
EO-3.2 Water Conservation	PS-12.9
EO-3.3 Energy Efficiency	PS-12.9
EO-3.4 Climate Protection Summit/Fair	PS-12.9
EO-3.5 Schools Program	PS-12.9

4.5.7 CUMULATIVE IMPACTS

According to the comment letter issued by the California Attorney General on the Coyote Valley Specific Plan, cumulative impacts should be considered. The letter states, “Global warming is a quintessentially cumulative impact, caused by the added effects of countless individual projects at the local, regional, state, national, and international level.” As noted previously, very few, if any individual projects, including General Plans, have the magnitude to have a direct impact on global GHG emissions. For the proposed 2010 General Plan Update, new GHG emissions in comparison to the 2009 Existing Conditions/Baseline emissions would be generated on the order of 550,000 MTCO₂e per year. This is above the CARB de minimis thresholds for transportation sources that has been applied to the 2010 General Plan Update. Consequently, the GHG emissions from the proposed 2010 General Plan Update would be cumulatively considerable, which would be a significant and unavoidable cumulative impact.

4.5.8 MITIGATION MEASURES

As described above, implementation of the proposed 2010 General Plan Update policies listed in Section 4.5.4 and the SCs listed in Section 4.5.5 would be effective in reducing GHGs and are, in effect, mitigation measures. However, some of the 2010 General Plan Update Implementation Actions are to “encourage” or “support” actions, rather than to “require” actions. In the opinion of the Attorney General, “Mitigation measures must be ‘fully enforceable.’ Adequate mitigation does not, for example, merely “encourage” or “support” carpools and transit options, green building practices, and development in urban centers. While a menu of hortatory GHG policies is positive, it does not count as adequate mitigation because there is no certainty that the policies will be implemented.” (DOJ 2009) Therefore, MM 4.5-1 will be incorporated into the 2010 General Plan Update.

MM 4.5-1 The City of Rancho Cucamonga will review the proposed 2010 General Plan Update policies included in Section 4.5.4 with a goal of developing enforceable actions for reducing GHG emissions consistent with City practice and philosophy.

The Attorney General states that a Climate Action Plan is reasonable mitigation.

“To allow for streamlined review of subsequent individual projects, we recommend that the Climate Action Plan include the following elements: an emissions inventory (to assist in developing appropriate emission targets and mitigation measures); emission targets that apply at reasonable intervals through the life of the plan; enforceable GHG control measures; monitoring and reporting (to ensure that targets are met); and mechanisms to allow for the revision of the plan, if necessary, to stay on target.(Attorney General 2009)”

Therefore, MM 4.5-2 will be incorporated into the 2010 General Plan Update.

MM 4.5-2 The City of Rancho Cucamonga will develop, adopt, and implement a Climate Action Plan (CAP) that incorporates and is consistent with the GHG emissions reductions goals of the State, San Bernardino County, and the SCAQMD or alternatively, the City will adopt and implement the applicable portions of a higher level CAP, such as that of San Bernardino County or SANBAG. An acceptable CAP shall include an emissions inventory; emission targets that apply at reasonable intervals through the life of the plan; enforceable GHG control measures; monitoring and reporting; and mechanisms to allow for the revision of the plan, if necessary, to stay on target, and must be adopted in a public process following environmental review, as described in CEQA Guidelines Section 15183.5.

MM 4.5-3 The City of Rancho Cucamonga shall join the proposed Joint Powers Authority (JPA) to be called the San Bernardino Valley Clean Energy District. This JPA is being formed in response to California AB 811, and would allow property owners to finance renewable generation and energy efficiency improvements that are permanently fixed to the property owner's residential, commercial, industrial, or other real property through low-interest loans that would be repaid as an item on the property owner's property tax bill. The loans could not be used to finance the purchase or installation of appliances that are not permanently fixed to the real property.

4.5.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Greenhouse Gas Emissions

Significant and Unavoidable.

Compatibility with Plans, Policies, and Regulations

Less Than Significant.

Cumulative Impacts

Significant and Unavoidable.

4.6 CULTURAL RESOURCES

This section analyzes cultural resources impacts with implementation of the proposed 2010 General Plan Update. Information in this section is derived from archaeological research conducted by BonTerra Consulting (Appendix E-1), Senate Bill 18 contact records (included as Appendix E-2), a paleontological records search conducted by the Natural History Museum of Los Angeles County (McLeod 2009) (included as Appendix E-3), and a historical resources survey conducted by Chattel Architecture (Chattel 2009) (refer to Appendix E-4). The results of these studies are summarized in this section.

4.6.1 RELEVANT POLICIES AND REGULATIONS

Federal

National Historic Preservation Act of 1966

Cultural resources are considered during Federal undertakings chiefly under Section 106 of National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations (36 *Code of Federal Regulations* [CFR] 800, Protection of Historic Properties). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of NHPA.

Section 106 of NHPA (16 *United States Code* [USC] 470f) requires Federal agencies to take into account the effects of their undertakings on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected cultural resource is assessed and mitigation measures are proposed to reduce the impacts to a less than significant level. Significant cultural resources are those that are listed or are eligible for listing in the NRHP in accordance with the criteria stated at 36 CFR 60.4, which are listed below.

The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and that:

- (a) Are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) Are associated with the lives of persons significant in our past; or
- (c) Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Have yielded, or may be likely to yield, information important in prehistory or history.

State

California Register of Historical Resources

CEQA requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. A “historical resource” is defined as a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (*California Public Resources Code* [PRC], Section 21084.1); a resource included in a local register of historical resources (14 *California Code of Regulations* [CCR], Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a][3]).

Section 5024.1 of *California Public Resources Code*, Section 15064.5 of the CEQA Guidelines (14 CCR), and Sections 21083.2 and 21084.1 of the CEQA Statutes were used as the basic guidelines for the cultural resources study. PRC 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purposes of the CRHR are to maintain listings of the State’s historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP (per the criteria listed at 36 CFR 60.4) and include those listed below.

The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and that:

- (a) Are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) Are associated with the lives of persons significant in our past; or
- (c) Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Have yielded, or may be likely to yield, information important in prehistory or history.

According to Section 15064.5(a)(3)(A–D) of the CEQA Guidelines (14 CCR), a resource is considered historically significant if it meets the criteria for listing in the NRHP (per the criteria listed at 36 CFR 60.4 previously discussed). Impacts that affect those characteristics of the resource that qualify it for the NRHP or that would adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered to have a significant effect on the environment. Impacts to cultural resources from the proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

The purpose of a cultural resources investigation is to evaluate whether any cultural resources remain exposed on the surface of the project area, or can reasonably be expected to exist in the subsurface. If resources are discovered, management recommendations would be included that require evaluation of the resources for NRHP or CRHR eligibility.

Senate Bill 18

Senate Bill (SB) 18 (*California Government Code*, Section 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB18 requires public notice to be sent to tribes listed on the Native American Heritage Commission's SB18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the *Public Resources Code* that may be affected by the proposed adoption or amendment to a general or specific plan.

Human Remains

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the *California Public Resources Code* states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours, which in turn must identify the person or persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

County

San Bernardino County Development Code

The County of San Bernardino adheres to the San Bernardino County Development Code Chapter 82.12 that consists of the Cultural Resources Preservation (CP) Overlay. The Overlay, which is established by Sections 82.01.020 and 82.01.030 of the Development Code, is intended to provide for the identification and preservation of important archaeological resources. This is necessary because:

- Many of the resources are unique and non-renewable; and
- The preservation of cultural resources provides a greater knowledge of County history, thus promoting County identity and conserving historic and scientific amenities for the benefit of future generations.

The County (according to Development Code, Section 82.12.030) requires a project proposed within the CP Overlay to include a report prepared by a qualified professional archaeologist that determines, through appropriate investigation, the presence or absence of archaeological and/or historical resources on the project site and within the project area. The report must also recommend appropriate data recovery or protection measures. The CP Overlay may be applied to areas (determined by cultural resources research and/or inventory) where archaeological and historic sites that warrant preservation are known or are likely to be present.

If evidence of Native American cultural resources is discovered during grading or excavation of a development site within a highly sensitive CP Overlay District, as determined by a qualified professional archaeologist, the local tribe will be notified. If requested by the tribe, a Native American Monitor shall be required during such grading or excavation to ensure all artifacts are properly protected and/or recovered (Development Code, Section 82.12.050).

The Paleontologic Resources (PR) Overlay, which is established by Sections 82.01.020 (Land Use Plan and Land Use Zoning Districts) and 82.01.030 (Overlays) of the Development Code, recognizes that:

- The identification and preservation of significant paleontologic (fossil) resources is necessary as many such resources are unique and non-renewable.

Preservation of such paleontologic resources provides a greater knowledge of County natural history, thus promoting County identity and conserving scientific amenities for the benefit of future generations. The Paleontologic Resources (PR) Overlay may be applied to those areas where paleontologic resources are known to occur or are likely to be present (determined through a paleontological records search). Detailed criteria for evaluation of paleontological resources and paleontologist qualifications are described in Sections 82.20.030 and 82.20.40 of the San Bernardino County Development Code.

4.6.2 EXISTING CONDITIONS

Setting

Prehistory

Horizon I: Early Man or Paleo-Indian Period (11,000 BCE to 7,500 BCE). While initially termed Early Man Horizon (I) by Wallace (1955), this early stage of human occupation is commonly referred to as the Paleo-Indian period today (Chartkoff and Chartkoff 1984). At inland archaeological sites, the surviving material culture of this period is primarily lithic, consisting of large, extremely well made stone projectile points and tools such as scrapers and choppers. Encampments were probably temporary, located near major kills or important resource areas.

Horizon II: Milling Stone Assemblages (7,500 BCE to 1,000 BCE). The Milling Stone Period was named for the abundant millingstone tools associated with sites of this period. These tools, the mano and metate, were used to process small, hard seeds from plants associated with shrub-scrub vegetation communities. An annual round of seasonal migrations was likely practiced, with movements coinciding with ripening vegetal resources and the periods of maximal availability of various animal resources.

In addition to gathering activities, evidence suggests that a diversity of subsistence activities, including hunting of various game animals, were practiced during this period of time (Koerper 1981; Koerper and Drover 1983).

Horizon III: Intermediate Cultures (1,000 BCE to 750 CE). The Intermediate period is identified by a mixed strategy of plant exploitation, terrestrial hunting, and maritime subsistence strategies. Evidence of increased mortar and pestle use during this time period is present. The mano and metate continued to be in use on a reduced scale, but the greatly intensified use of the mortar and pestle signaled a shift away from a subsistence strategy based on seed resources to that of the acorn. It is probably during this time period that the acorn became the food staple of the majority of the indigenous tribes in Southern California. This subsistence strategy continued until European contact. Material culture generally became more diverse and

elaborate during this time period and includes steatite containers, perforated stones, bone tools, ornamental items, and asphalt adhesive.

Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE). During the Late Prehistoric period, exploitation of many food resources, particularly marine resources among coastal groups, continued to intensify. The material culture in the Late Prehistoric Horizon increased in complexity in terms of the abundance and diversity of artifacts being produced. Evidence recovered from this period of time suggests a greater use of the bow and arrow. Shell beads, ornaments and other elements of material culture continue to be ornate, varied and widely distributed, the latter evidence suggestive of elaborate trade networks.

Ethnography

What is now the City of Rancho Cucamonga area was occupied during the Late Prehistoric Period by the Native American societies commonly known to anthropologists as the Gabrielino (Kroeber 1925; Bean and Shipek 1978; Bean and Smith 1978). The City is named after the Gabrielino village of *Kukamo* or *Cucamonga* (Kroeber 1925), which was located in the eastern extreme of the tribe's territory. The name is thought to come from a Gabrielino word meaning "sandy place" (CRM Tech 2007). The term "Gabrielino" identifies those Native Americans who were under the control of the Spanish Mission San Gabriel. The overwhelming number of people here were of the same ethnic nationality and language group who generally referred to themselves as *Tongva*. Their territory included the entire Los Angeles Basin and extended from northern Orange County north to the San Fernando Valley in Los Angeles County and eastward to the Riverside and San Bernardino area. It also included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers (Bean and Smith 1978). The language of the group is derived from the Takic family, part of the Uto-Aztecan linguistic stock.

Gabrielino/Tongva

The Gabrielino/Tongva arrived in the Los Angeles Basin prior to 500 BCE, gradually displacing the indigenous peoples. Large, permanent villages were established in the fertile lowlands along rivers and streams and in sheltered areas along the coast. Eventually, Gabrielino territory encompassed the greater Los Angeles Basin, the coastal regions from Topanga Canyon in the north to perhaps as far south as Aliso Creek, as well as the islands of San Clemente, San Nicholas, and Santa Catalina (Bean and Smith 1978).

The subsistence economy of the Gabrielino was one of hunting and gathering. A wide variety of tools and implements were employed by the Gabrielino to gather, collect, and process food resources.

Early History

Juan Rodriguez Cabrillo sailed along the California coast in 1542 and, according to available records, stopping only at San Diego and the Channel Islands, was the first European to come into contact with the Gabrielino.

Mission San Gabriel, in Los Angeles County, was founded in September 1771, and all the Native Americans from the Los Angeles plain were persuaded to settle in its vicinity. During much of the Spanish-American period, the San Bernardino Valley was under the control of the Mission. When the mission system was secularized beginning in the 1830s, the 13,000-acre Spanish land grant of Rancho Cucamonga was awarded to Tiburcio Tapia in 1839 (CRM Tech 2007).

The Mexican-American War ended on February 2, 1848 with the signing of the Treaty of Guadalupe Hidalgo. The treaty established California as a United States possession and provided for the retention of private lands held by the conquered Mexicans. In 1851, the United States required that the courts approve all Hispanic land grants; however, many of the land grants were not approved and the division of many of the larger ranchos occurred.

The effects of mission influence upon the local native populations were devastating. The reorganization of their culture alienated them from their traditional subsistence patterns and social customs. European diseases, against which the natives had no immunities, reached epidemic proportions and Gabrielino populations were decimated (Johnston 1962). Although most Gabrielino submitted to the Spanish and were incorporated into the mission system, some refused to give up their traditional existence and escaped into the interior regions of the State.

Historic Context

The City of Rancho Cucamonga was incorporated in 1977, consolidating the three towns of Cucamonga, Alta Loma and Etiwanda into one municipality. Given its fertile soil, temperate climate, and access to an ample supply of water, agriculture developed as the main industry in Rancho Cucamonga beginning in the latter half of the 19th Century, when farmers and vintners began producing a variety of crops, particularly citrus fruits and grapes for wine-making. Although the local agriculture industry has changed over time due to a variety of factors, including technological advancement and transportation improvements, agriculture remains a recognizable, although fading, feature of Rancho Cucamonga's physical landscape (Chattel 2009).

The City of Rancho Cucamonga has been a center of land development opportunity since Franciscan priests and Spanish soldiers entered and began their occupation of the area in the late 18th century. The name "Cucamonga," a Shoshone word for "sandy place," first appeared in a written record of the San Gabriel Mission dated 1811. As a result of the secularization of the missions in 1831, the land owned by the missions was divided into land grants, including the 13,000 acre Rancho Cucamonga, granted to Los Angeles City Council president and businessman Tiburcio Tapia in 1839. The Rancho Cucamonga was defined by El Camino Real on its southern border, the San Gabriel Mountains to the north, the San Antonio Creek to the west and present-day Etiwanda Avenue to the east. Tapia built his home on the top of visually prominent Red Hill, planted some of Rancho Cucamonga's first vineyards, and built a small winery, which would later be enlarged and reestablished as the Thomas Winery in 1933 and then again as the Filippi Vineyards winery in 1967. Portions of the historic winery buildings, located at the northeast corner of Foothill Boulevard and Vineyard Avenue, are currently being reused for commercial purposes (Chattel 2009).

Upon the death of Tapia in 1845, Tapia's daughter, Maria Merced Tapia de Prudhomme, became the sole heir of the Rancho Cucamonga. Maria Merced's husband, Leon Victor Prudhomme, assumed control of the rancho and eventually sold it to John Rains in 1858. Rains significantly expanded the vineyards, planting approximately 125,000 to 150,000 vines. He was found murdered in 1862 and soon after his death, his widow, Dona Maria Merced Williams de Rains, inherited the ranch property. She encountered financial problems and the property fell into foreclosure, ultimately marking the close of the rancho way of life in the Cucamonga region (Chattel 2009).

Resource Description

Archaeological Resources

BonTerra Consulting archaeologist Paul Shattuck conducted an archaeological records search at the San Bernardino Archaeological Information Center, San Bernardino County Museum in Redlands, on February 27 and 28 and March 3 and 5, 2009. A bibliography of cultural resources studies is included as Appendix E-1. There have been 277 cultural resources studies performed within the Study Area and that were recorded in the County of San Bernardino’s archaeological database. An additional 104 studies that could contain information about unrecorded archaeological sites are not yet incorporated into the database because of backlog issues on report recordings. A total of 381 studies are listed in Appendix E-1. According to the results of the records search, 18 archaeological resources have been recorded within the City and its SOI. Table 4.6-1 identifies each of the recorded sites and provides a description of the resources that were recorded. Resources range from large, complex prehistoric village sites to isolated artifacts.

**TABLE 4.6-1
ARCHAEOLOGICAL RESOURCES**

Site Number	Recorder/Year	Description
CA-SBR-270 Update	Smith/1940 Blackburn/1966	Cucamonga Village site. Campsite; large milling stone, numerous flaked artifacts.
CA-SBR-895 Update	Leonard/1975 Martz/1976	Cucamonga site. Habitation. Yucca roasting site. Excavation yielded obsidian knife and flakes, mortar, flakes, cores.
CA-SBR-897	Weaver/1975	Ground stone scatter.
CA-SBR-898	Weaver/1975	Artifact scatter with fresh water shell.
CA-SBR-899	Crowley/1975	Light ground stone scatter.
CA-SBR-900	Crowley/1975	Artifact scatter, including a chalcedony blade fragment.
CA-SBR-901	Smith/1940	Liberty Grove site. Stone cairn features with associated ground stone and flaked tools; human bone fragments.
CA-SBR-902	Smith and Walline/1963	Cogged stone, incised slate, ground stone, chipping waste.
CA-SBR-1593	Sayles/1935	Campsite; scrapers, metates, hammerstones, choppers.
CA-SBR-1608 Update	Smith/unknown Smith/1975	Milling stones. Site destroyed.
CA-SBR-3004	Smith/1976	Bedrock slick and hammerstone.
CA-SBR-6815/H	Alexandrowicz/1991	Multi-component site with a prehistoric Millingstone Horizon component and a sparse scatter of historic artifacts.
CA-SBR-6816/H	Alexandrowicz et al./1991	Multi-component site with a prehistoric Millingstone Horizon component and a historic era well, stone berm, and wagon road.
P36-060255	Lerch/1986	Isolated obsidian biface.
P36-060257	Landis/1993	Isolated secondary flake.
P36-060258	Gross/1987	Groundstone mortar.
P36-060259	Unknown/unknown	Isolated mano.
P1084-9	Unknown/unknown	Isolated mano and metate fragments.
Source: SBAIC		

Native American Consultation

Pursuant to SB18 (*California Government Code*, Section 65352.3) requirements, the City of Rancho Cucamonga initiated contact with the Native American Heritage Commission (NAHC) by requesting a sacred lands file search and tribal contact list (refer to Appendix E-2). The tribes identified by the NAHC were initially contacted by letter on July 16, 2008. The initial letters received no responses. Therefore, the City made a second attempt to contact tribes via letter emailed on December 15, 2008. This was followed shortly after by telephone calls to each tribe. Tribes were informed of the proposed update to the General Plan, and were invited to consult. The tribes and their representatives contacted include the following:

- Anthony Madrigal of the Cahuilla Band of Mission Indians,
- Carol Tobin of the San Manuel Band of Mission Indians,
- Joe Ontiveros of the Soboba Band of Mission Indians,
- Anthony Morales of the Gabrielino/Tongva San Gabriel Band of Mission Indians,
- Russell Romo and Carmen Majito of the San Luis Rey Band of Mission Indians,
- Robert Martin of the Morongo Band of Mission Indians,
- Anna Hoover of the Pechanga Band of Mission Indians, and
- Goldie Walker of the Serrano Nation of Indians.

According to the SB18 process, the contacted tribes have 90 days in which to respond to the lead agency's initial contact with a request to consult. The 90-day response period ended on March 15, 2009. As of January 2010, five responses were received by the City from these contacts. The Serrano Nation of Indians, the Pechanga Band of Mission Indians, the Gabrielino/Tongva San Gabriel Band of Mission Indians, the Soboba Band of Mission Indians, and the San Manuel Band of Mission Indians responded via telephone. The majority of respondents indicated that they had no comments at the time, and one commenter requested that cultural resources be adequately addressed in the General Plan. A summary of responses is provided in Appendix E-2.

Paleontological Resources

Based on review of USGS 7.5-minute quadrangles (Mount Baldy, Cucamonga Peak, Devore, Guasti, and Ontario), the Study Area is underlain by a variety of bedrock types. The proposed 2010 General Plan Update Study Area contains some exposures of gneissic metamorphic rocks; exposures of younger Quaternary alluvium derived as fan deposits from the San Bernardino Mountains with some fluvial deposits in drainages; younger Quaternary alluvium exposed across the entire northeastern portion of the Study Area with some fluvial deposits in the intermittent drainages; and exposures of older fan deposits around Red Hill in the southwestern portion of the Study Area.

Research performed at the Natural History Museum of Los Angeles County indicates that the bulk of the Study Area consists of surficial sedimentary or metamorphic rocks that are unlikely to contain significant vertebrate fossils; however, there may be sedimentary deposits at a greater depth (refer to McLeod 2009 in Appendix E-3). Although shallow excavations within the younger Quaternary alluvium are unlikely to expose significant vertebrate fossils, deeper excavations that extend into older Quaternary deposits may encounter significant fossils. Alluvial deposits extend throughout the Study Area (McLeod 2009).

Historic Resources

Chattel Architecture, Planning & Preservation (Chattel) completed background research, a historic context statement, and a reconnaissance-level historic resource survey of select properties in the City to identify potential historic resources and districts (refer to Appendix E-4). Properties reviewed in the survey were evaluated in terms of the degree to which they convey historical significance and integrity.

According to the background research, the City of Rancho Cucamonga has 445 previously identified properties listed in the City's "Historic Site List" (dated) April 23, 2009 and one property (the John Rains House at 7869 Vineyard Ave.) listed in the National Register of Historic Places (NRHP). These properties include five properties listed in the California Register of Historical Resources (CRHR), two California Historical Landmarks, and six California Points of Historical Interest. The City has 76 Designated Local Landmarks (DLLs) and 29 Designated Points of Interest (DPI). In addition, the City identified 8 properties potentially eligible for listing in the NRHP, which were identified as "Potential National Register" (PNR) properties; 115 properties identified as "Potential Local Landmarks" (PLLs), 3 of which have been demolished; 24 properties determined insignificant or "Survey Determined Insignificant" (SDI); and 154 properties that were documented but listed as "Survey Undetermined Significance" (SUS).

As part of the proposed 2010 General Plan Update, Chattel completed a new survey of historic resources and focused on the following elements:

- New determination of eligibility due to a property not having previously been surveyed.
- New determination of eligibility due to passage of time. The National Register has an arbitrary 50-year cut-off for listing (i.e. no properties constructed within the past 50 years may be listed, except under special circumstances). As a result, the previous survey may not have evaluated buildings constructed after approximately 1949 and would not have treated post-World War II architecture and tract housing as potential historic resources.
- Change in eligibility due to alteration or demolition of historic resources.
- Change in eligibility due to new information reflected in historic context.

According to the City of Rancho Cucamonga, there are 11 locations within the Study Area that contain concentrations of properties constructed prior to 1965 (refer to Exhibit 4.6-1, Historic Resources). Within these 11 areas, Chattel completed a new survey of 432 properties with the potential for historical significance. Of these 432 properties, 210 retained sufficient integrity (of location, design, setting, materials, workmanship, feeling, and/or association) to warrant recordation. Appendix E-4 identifies each of these 210 properties. There are 17 properties that were not visible from the public right-of-way and were, therefore, not evaluated.

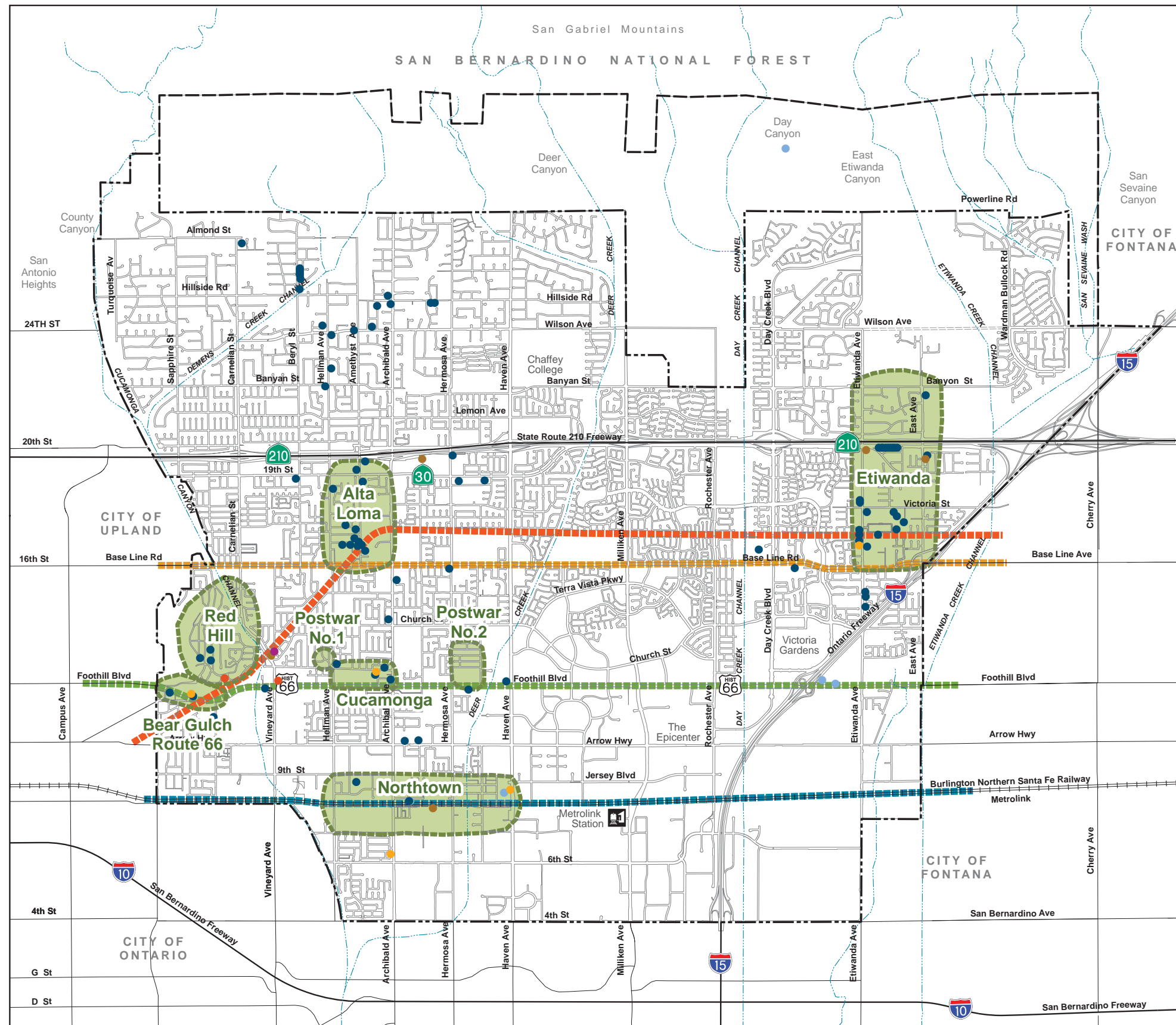
Based on the new survey, each of the 210 recorded properties was assigned a California Historical Resource Status Code. These codes, created by the State Office of Historic Preservation, facilitate identification of historic resources for purposes of CEQA and for determining eligibility of each property for the NRHP, the CRHR, the local register of historic resources, or local historic districts and/or Neighborhood Character Areas (NCAs). Table 4.6-2 provides a listing of Status Codes used in this study.

**TABLE 4.6-2
CALIFORNIA HISTORICAL RESOURCE STATUS CODES**

Status Code	Description
Determined eligible for listing in the NRHP or the CRHR	
2S2	Individual property determined eligible for the NRHP by consensus through Section 106 process. Listed in the CRHR.
Appears eligible for recognition as historically significant by local government	
5S3	Appears individually eligible for local listing or designation through survey evaluation.
Appears eligible for the NRHP or the CRHR through survey evaluation	
3CS	Appears eligible for the CRHR as an individual property through survey evaluation.
3S	Appears eligible for NRHP as an individual property through survey evaluation.
Not eligible for listing or designation as specified	
6Z	Found ineligible for the NRHP, the CRHR, or local designation through survey evaluation. Most frequently used in Rancho Cucamonga to describe: historic properties with low integrity, properties that once contained historic buildings and were found to be vacant lots, properties containing non-historic buildings.
6Q	Determined ineligible for local listing or designation as a historic district through a survey process; may warrant special consideration for local planning.
6DQ	Individual property identified through a survey process as a non-contributor to a potential local historic district or is located within a 6Q area/neighborhood; may warrant special consideration for local planning. Most frequently used in Rancho Cucamonga to describe properties that do not retain sufficient integrity to be listed individually but contribute to Rancho Cucamonga Neighborhood Character Areas (Conservation Districts).
Not evaluated or needs reevaluation	
7R	Identified in a reconnaissance level survey, but not evaluated. Most frequently used to describe historic resources that cannot be seen from the public right-of-way.
Status codes used in previous survey (unique to Rancho Cucamonga)	
DEM	Demolished
DLL	Designated Local Landmark
PLL	Potential Local Landmark
PNR	Potential National Register
SDI	Survey Determined Insignificance
SUS	Survey Undetermined Significance
URM	Unreinforced Masonry
NRHP: National Register of Historic Places; CRHR: California Register of Historic Resources Source: Chattel 2009.	

Of the 210 recorded properties, 5 properties appear to be individually eligible for listing in the NRHP, receiving a California Historical Resource Status Code 3S, as described in Table 4.6-2. These resources, as discussed below, would also be eligible for listing in the CRHR and for local designation, if not already listed or designated.

- **Sam and Alfreda Maloof Compound.** The Sam and Alfreda Maloof Compound is located at 5131 Carnelian Street. This compound was previously listed in the CRHR and is being reevaluated because the compound was moved from its original site (9553 Highland Avenue); NRHP nomination is currently being prepared for the receiver site.
- **Demens-Tolstoy House.** The Demens-Tolstoy House is located at 9686 Hillside Road (Assessor's Parcel Number [APN] 106156104). Chattel's 2009 survey reconfirms previous identification of NRHP eligibility.



Designated Historic Sites

- Rancho Cucamonga Local Landmarks
- Rancho Cucamonga Points of Historical Interest
- California Register
- California Historical Landmarks
- California Points of Historical Interest
- National Register of Historic Places

Historic Transportation Routes

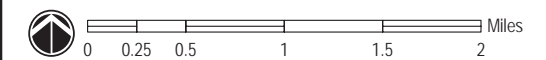
- ▬ Foothill Boulevard (Route 66)
- ▬ Pacific Electric Railway Corridor
- ▬ Atchison Topeka & Santa Fe Railway
(now Burlington Northern Santa Fe Railway)
- ▬ Base Line Road (California Point of Historical Interest)

Neighborhood Character Areas

- ▭ Neighborhood Character Areas

- ▬ Rancho Cucamonga City Boundary
- ▬ Sphere of Influence

Notes: Some historical sites may contain more than one historical classification.



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Rancho Cucamonga Historic Resources

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2001 and San Bernardino County Assessor, 2009

Exhibit 4.6-1



(REV: JFG 021010) R:/Projects/Hogle/J007/graphics/EIR/ex4.6-1_hr.pdf

- **Cucamonga Rooming House.** The Cucamonga Rooming House is located at 9680 San Bernardino Road (APN: 20813109). Chattel's 2009 survey reconfirms previous identification of National Register eligibility.
- **China House.** China House is located at 9591 San Bernardino Road (APN: 20815124). Chattel Architecture's 2009 survey reconfirms previous identification of NRHP eligibility.
- **Biane Winery.** Biane Winery is located at 9985 8th Street (APNs 20920119/20920120).

Based on the new survey, there are 15 properties, including the 4 that appear eligible for the NRHP, that appear individually eligible for listing in the CRHR, receiving a California Historical Resource Status Code 3CS. The following ten resources would be eligible for designation in the CRHR and as local landmarks.

- **Stone House.** Stone House is located at 10270 Church Street (APN 107727103).
- **Sanchez Home and Winery.** The Sanchez Home and Winery is located at 7402 Hermosa Avenue (APN 107703105).
- **Jones House.** The Jones House is located at 13232 Victoria Avenue (APN 22706171).
- **Mandala Winery.** The Mandala Winery is located at 10277 Foothill Boulevard (APN 20833123).
- **Sweeten Hall.** Sweeten Hall, which was formerly Cucamonga Public School, is located at 9324 San Bernardino Road (APN 20811109).
- **Scott House.** Scott House is located at 8555 Grove Avenue (APN 20722203).
- **Stone House.** This property is located at 8619 Baker Avenue (APN 20713253).
- **Willows School.** Willows School is located at 8968 Archibald Avenue (APN 20917115).
- **Billings House.** Billings House is located at 7601 Archibald Avenue (APN 107732112).
- **Southern Pacific Overcrossing.** Foothill Boulevard (APN 20710139).

There are 110 properties that appear individually eligible for local designation, receiving a California Historical Resource Status Code 5S3. A complete listing of these properties is included in Appendix E-4.

Additionally, 281 properties of those surveyed were found ineligible for the NRHP, CRHR, or for designation as local historic landmarks because they do not meet the minimum criteria for eligibility (i.e., CHR status codes 6Z, 6Q, 6DQ, and 6L). However, 78 6DQ properties and 2 6Q properties were identified and may warrant special consideration in local planning efforts as contributors to Neighborhood Character Areas (NCAs).

While the City does not appear to have any potentially historic districts that would be eligible at the local, State, or national levels, eight NCAs were identified as areas of interest, five of which are shown on Exhibit 4.6-1. These NCAs include:

- the historic town centers of Cucamonga, Alta Loma and Etiwanda;

- the Latino community of North Town;
- the historic residential neighborhood located on Red Hill;
- the Bear Gulch area of Foothill Boulevard/Route 66;
- the Cucamonga Vineyard Tract Subdivision B, Tract No. 5576 (including Hellman Avenue, San Bernardino Road, Harvard Street, Montara Avenue, Selma Avenue); and
- Tract Nos. 5591, 5593, and 8892 (including Effen Street, Dorset Street, Stafford Street, Hermosa Avenue, Center Avenue, Ashford Street, Norwick Street, and Kinlock Avenue).

Each NCA received a California Historical Resource Status Code of 6Q, with contributing resources located within the NCA receiving status code of at least 6DQ.

4.6.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to cultural resources if it would:

- Threshold 4.6a:** Cause a substantial adverse change to the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Threshold 4.6b:** Cause a substantial adverse change to the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5;
- Threshold 4.6c:** Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; and/or
- Threshold 4.6d:** Disturb any human remains, including those interred outside formal cemeteries.

4.6.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update that address cultural resources issues in the City, with an emphasis on historic resources. Implementation of these goals and policies and their corresponding implementation actions would reduce impacts to cultural resources. These include those goals and policies listed below.

Policy LU-4.6: Accommodate land uses that support the activity centers envisioned in the Historic Cucamonga sector, as identified in the Foothill Boulevard Specific Plan.

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

Policy LU-6.5: Encourage the re-use and rehabilitation of historic or high-quality existing buildings.

Implementation Action: *Develop an ordinance or ordinance amendment to allow for relief from certain development standards (height, setbacks, parking, etc.) for projects*

involving the rehabilitation of historic resources. Develop an ordinance or ordinance amendment that presents a range of possible incentives for development projects with adaptive reuse of historic resources.

Goal LU-9: Foster a cohesive, healthy community through appropriate patterns and scales of development, including complementary transitions between districts, neighborhoods, and land uses.

Policy LU-9.4: Ensure that infill development is sensitive and compatible with the design and scale of all adjacent historic properties.

Implementation Action: *Develop guidelines or standards that are specific to potential infill development sites to ensure that developers have considered the individual needs of the community and unique characteristics of the aesthetics, particularly those lots identified within each of the specific mixed use designations.*

Goal LU-15: Maintain a local historic resource survey, local inventory of historic resources, and local register of historic resources.

Policy LU-15.1: Regularly update the City's historic context statement, historic resource survey, and inventory of historic resources.

Implementation Action: *Prepare a comprehensive historic resource survey, inventory of historic resources, and a historic context statement for the City. Once adopted, these documents should be updated every five years.*

Policy LU-15.2: Identify funding sources to support regularly updating the historic context statement and historic resource survey.

Implementation Action: *Consider the adoption of amendments to the demolition review process to address historic resources, and determine a supplemental development fee for projects with or adjacent to identified historic resources.*

Policy LU-15.3: Continue to encourage listing local historic resources in the California and National Registers.

Implementation Action: *Continue to work with private property owners to attain listing status on the National and State Registers for local historic resources.*

Policy LU-15.4: Define local register of historic resources.

Implementation Action: *The City should officially establish the "Rancho Cucamonga Register of Historic Resources".*

Policy LU-15.5: Designate local landmarks from the inventory.

Implementation Action: *Identify surveyed resources eligible for listing in the local register of historic resources, and create local landmark designations.*

Goal LU-16: Protect historic resources.

Policy LU-16.1: Incorporate historic preservation principles into the City's project review process.

Implementation Action: Develop staff procedures for review of development proposals that affect historic resources consistent with the Secretary of the Interior's Standards.

Policy LU-16.2: Avoid illegal demolition of historic resources and "demolition by neglect".

Implementation Action: Develop an ordinance or ordinance amendment to address neglected properties that are considered historic resources, with provisions for penalties for intentional neglect and/or vandalism. Identify funding sources to be used should the City need to seize and stabilize an affected resource. Develop an ordinance or ordinance amendment to cause penalties, such as delay of building permit issuance, for demolition of historic resources without City approvals.

Goal LU-17: Expand preservation incentives.

Policy LU-17.2: Create a conservation easement program for historic resources.

Implementation Action: Develop an application and process for the creation and use of conservation easements.

Policy LU-17.3: Develop a preservation grant program.

Implementation Action: Develop an application and process for qualifying property owners to have access to funds for the purposes of repairing historic resources.

Policy LU-17.4: Facilitate acquisition of preservation loans.

Implementation Action: Coordinate with lending institutions to facilitate a revolving loan funding source specifically for the purpose of preservation of historic resources.

Policy LU-17.5: Continue to pursue designation as a Certified Local Government (CLG).

Implementation Action: Allocate staff time to address removing barriers to acquiring CLG designation, with the goal of increasing access to funding and programs that can advance preservation of historic resources.

Policy LU-17.6: Continue to utilize Community Development Block Grant (CDBG) funds for historic preservation.

Implementation Action: Direct CDBG project funds towards updating the City's historic resources inventory and education programs.

Policy LU-17.7: Continue to promote use and knowledge of the California Historical Building Code (CHBC).

Implementation Action: Develop an ordinance or ordinance amendment to adopt and apply the CHBC to local historic resources, and update any City applications and/or brochures to include this option.

Policy LU-17.8: Promote the use of the Federal Historic Preservation Tax Incentives Program.

Implementation Action: Develop an informational brochure and/or link on the City's web site to direct property owners of historic resources to the Federal Tax Incentives Program.

Policy LU-17.9: Address adaptive re-use in the Historic Preservation Ordinance.

Implementation Action: Develop an ordinance or ordinance amendment that presents a range of possible incentives for development projects with adaptive reuse of historic resources.

Policy LU-17.10: Employ the use of floor area incentives.

Implementation Action: Develop an ordinance or ordinance amendment to allow for a transfer of Floor-Area Ratio (FAR) or densities to preserve the properties with historic resources.

Policy LU-17.11: Continue to make available land development incentives and modifications to development standards.

Implementation Action: Develop an ordinance or ordinance amendment to allow for relief from certain development standards (height, setbacks, parking, etc.) for projects involving the rehabilitation of historic resources.

Policy LU-17.12: Promote the use of the National Park Service (NPS) Route 66 Corridor Preservation Program's cost-share grant program for preservation of Historic Route 66 resources.

Implementation Action: Develop an informational brochure and/or link on the City's web site to direct property owners of historic resources within the Route 66 Corridor to NPS cost-share grant programs.

Goal LU-18: Identify and protect cultural landscape features.

Policy LU-18.1: Prepare a Cultural Landscape Report.

Implementation Action: Create a comprehensive plan for local cultural landscape preservation to complement architectural preservation efforts, including the update of existing surveys of historic resources.

Policy LU-18.2: Update files for identified historic resources to include extant cultural landscape features.

Implementation Action: Create a comprehensive plan for local cultural landscape preservation to complement architectural preservation efforts, including the update of existing surveys of historic resources.

Policy LU-18.3: Create a conservation easement program for cultural landscapes.

Implementation Action: Develop an application and process for the creation and use of conservation easements.

Goal LU-19: Identify and protect historic districts and Neighborhood Character Areas (NCAs).

Policy LU-19.1: Identify historic districts and Neighborhood Character Areas (NCAs).

Implementation Action: *Include the identification of boundaries for potential historic district designations as part of the preparation of the updated historic survey.*

Policy LU-19.2: Create new and modify existing specific plans to guide development of historic districts and Neighborhood Character Areas (NCAs).

Implementation Action: *Review and amend Specific Plans to address potential development proposals within historic districts.*

Policy LU-19.3: Evaluate post-World War II buildings for historic significance.

Implementation Action: *Include the evaluation of eligible residential building tracts as part of the preparation of the updated historic survey.*

Goal LU-20: Develop a historic resource interpretation program.

Policy LU-20.1: Create a historic resource interpretation program aimed at enhancing both public awareness of local history and opportunities for heritage tourism.

Implementation Action: *Inventory the types of educational and awareness programs regarding historic resources already in place, and review methods for expanding the number of sites and available information.*

Goal LU-21: Preserve and interpret Historic Route 66 for residents, visitors, and business owners.

Policy LU-21.1: Evaluate Route 66 properties and designate Route 66-related historic resources.

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

Policy LU-21.2: Amend existing Foothill Boulevard Specific Plan (Development Code §17.32) to include a linear Route 66 Neighborhood Character Area (NCA).

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

Policy LU-21.3: Clarify the Foothill Boulevard Specific Plan and Route 66/Foothill Boulevard Visual Improvement Plan/Foothill Boulevard/Route 66 Mural Program to include policies that prioritize preservation of documented historic character of Route 66.

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

Goal LU-23: Educate residents and City staff to address historic properties.

Policy LU-23.1: Continue to work with City staff and homeowners' organizations, historical societies, and historic preservation advocacy groups to develop education programs about maintenance and care of historic buildings.

Implementation Action: *Inventory the types of educational and awareness programs regarding historic resources already in place, and review methods for expanding the number of sites and available information.*

Policy LU-23.2: Train City staff in historic preservation.

Implementation Action: *Develop staff procedures for review of development proposals that affect historic resources consistent with the Secretary of the Interior's Standards.*

Policy ED-2.3: Expand recreation and cultural attractions to enhance tourism/visitor potential and to boost sales and transient occupancy tax.

and

Policy ED-3.2: Provide community and cultural amenities.

Implementation Action: *Develop brochures or links from the City's web site to showcase the various recreational and cultural venues to attract visitors to the City. Enhancement of cultural amenities, including regional entertainment options, recreation, and historic preservation, will help to embellish the City's reputation as a destination for a wide range of visitors.*

4.6.5 STANDARDS CONDITIONS OF APPROVAL

SC 4.6-1 If a future project pursuant to the 2010 General Plan Update contains a designated Historical Landmark, the site shall be developed and maintained in accordance with the applicable Historic Landmark Alteration Permit. Any further modifications to the site including, but not limited to, exterior alterations and/or interior alterations which affect the exterior of the buildings or structures, removal of landmark trees, demolition, relocation, reconstruction of buildings or structures, or changes to the site, shall require a modification to the Historic Landmark Alteration Permit subject to Historic Preservation Commission review and approval.

SC 4.6-2 If human remains are discovered on-site before or during grading, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5.

4.6.6 ENVIRONMENTAL IMPACTS

Historical Resources

Threshold 4.6a: **Would the proposed General Plan Update cause a substantial adverse change to the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?**

As discussed previously, 210 properties were deemed eligible for inclusion on the NRHP, CRHR, or a local designation list. For purposes of this analysis, historical significance is assumed for any property deemed eligible for inclusion on the NRHP, CRHR, or a local designation list. Buildout of the proposed 2010 General Plan Update would involve development and redevelopment activities which may directly or indirectly impact the identified properties. Applicable policies of the proposed 2010 General Plan Update (refer to Section 4.6.4, General Plan Goals and Policies) identify a variety of policies and related implementation actions that include preservation techniques such as creating conservation easements and incorporating historic preservation principles into the City's project review process. Compliance with these General Plan policies would ensure that effort is made to preserve and protect historic resources in place. To the extent that this is not possible, implementation of MM 4.6-1 would require separate evaluation; specific mitigation measures must be developed to reduce the impacts of the project on historical resources to the maximum extent feasible. Additionally, pursuant to SC 4.6-1 any proposed modifications to designated Historical Landmarks would be subject to Historic Preservation Commission review and approval. Compliance with applicable policies, SC 4.6-1, and implementation of MM 4.6-1 would reduce potential impacts to a less than significant level.

Impact 4.6a: Buildout of the proposed 2010 General Plan Update has the potential to significantly impact historical resources. Compliance with General Plan policies, SC 4.6-1, and implementation of MM 4.6-1 would reduce impacts to historical resources to a less than significant level.

Archaeological Resources

Threshold 4.6b: Would the proposed General Plan Update cause a substantial adverse change to the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?

As identified previously, buildout of the proposed 2010 General Plan Update may directly impact 18 known prehistoric archaeological sites in the Study Area. Where feasible, sites will be avoided and preserved without evaluation since archaeological excavation is considered a destructive activity and therefore an impact. Given the presence of recorded resources throughout the Study Area, significant subsurface archaeological resources may also exist. The potential to encounter previously unknown archaeological resources during excavation and construction activities for project implementation is a potentially significant impact. However, this impact would be reduced to a level considered less than significant with implementation of MMs 4.6-2 and 4.6-3.

Impact 4.6b: The proposed 2010 General Plan Update has the potential to impact unknown archaeological sites, resulting in a potentially significant impact. Implementation of MMs 4.6-2 and 4.6-3 would reduce impacts to less than significant levels.

Paleontological Resources

Threshold 4.6c: Would the proposed General Plan Update directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

As previously discussed, most of the Study Area consists of surficial sedimentary or metamorphic rocks that are unlikely to contain significant vertebrate fossils. The younger Quaternary alluvial sediments in the main active drainages and the older Quaternary fan

deposits nearest the San Bernardino Mountains and around Red Hill are not expected to contain significant vertebrate fossils; however, deeper excavations into Quaternary alluvium throughout most of the rest of the Study Area and that expose older Quaternary alluvial sediments may potentially contain fossil resources. The presence of sedimentary units known to contain fossil materials indicates that there is a potential for unidentified, significant, non-renewable paleontological resources; therefore, future buildout of the 2010 General Plan Update within these areas would have a potentially significant impact on paleontological resources. Implementation of MM 4.6-4 would reduce potential impacts to less than significant levels.

Impact 4.6c: The proposed 2010 General Plan Update has the potential to impact non-renewable paleontological resources, resulting in a potentially significant impact. Implementation of MM 4.6-4 would reduce impacts to less than significant levels.

Human Remains

Threshold 4.6d: Would the proposed General Plan Update disturb any human remains, including those interred outside formal cemeteries?

No direct evidence of human remains has been found as a result of surveys of the Study Area. Based on these data, no disturbance of human remains is anticipated as a result of the Project. However, the presence of prehistoric archaeological sites within the Study Area, especially those with buried deposits, increases the likelihood that human remains may be present. Implementation of SC 4.6-2, which addresses the potential discovery and treatment of human remains pursuant to the *California Health and Safety Code*, ensures that potential impacts would be less than significant.

Impact 4.6d: The proposed 2010 General Plan Update has the potential to disturb unknown human remains; however, compliance with SC 4.6-2 would ensure that potential impacts would be less than significant.

4.6.7 CUMULATIVE IMPACTS

Direct impacts to cultural resources are generally site specific. As defined in Section 15130 of the CEQA Guidelines, a cumulative impact consists of an impact that is created as a result of the incremental effects of a proposed project, together with the effects of other projects, causing related impacts. Although a project, in conjunction with the effects of past projects, other current projects, and probable future projects may result in the disturbance of prehistoric archaeological resource sites and paleontological resources throughout the region, the City requires the mitigation of impacts to these resources (i.e., MMs 4.6-2 through 4.6-4). Therefore, despite the site-specific nature of the resources, the mitigation identified for use in the event that unknown or undocumented resources were discovered would reduce the potential for cumulative impacts. As a result, anticipated development on a project site would not contribute to a significant cumulative impact.

Cumulative effects on historic resources are a concern in the event that individual historical resources are impacted through implementation of multiple projects, thus resulting in a loss of multiple resources. The City of Rancho Cucamonga has identified a program for reducing potential impacts to historical resources as set forth in the applicable General Plan policies listed in Section 4.6.4, and implementation of MM 4.6-1 would further reduce the likelihood of a significant impact. Further, as development occurs within surrounding cities, other historical resources representing a similar genre or type of architecture may be impacted; however, the

proposed 2010 General Plan Update would not contribute to this cumulative impact to historic resources. A less than significant cumulative impact would occur with implementation of mitigation measures and adherence to applicable policies and SCs.

4.6.8 MITIGATION MEASURES

The proposed mitigation recommended prior to any ground disturbing activities consist of those measures listed below.

MM 4.6-1 Prior to the issuance of grading permits for any future development within the General Plan Study Area, project applicants shall ensure that, to the maximum extent possible, direct or indirect impacts to any known properties that are deemed eligible for inclusion on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or a local designation be avoided and/or preserved consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Should avoidance and/or preservation not be a feasible option, a qualified architectural historian shall develop a mitigation program which may include, but not be limited to, formal documentation of the structure using historical narrative and photographic documentation, facade preservation, or monumentation. Properties are not equally significant, and some retain more significance than others. Therefore, prior to development decisions being made, a qualified architectural historian shall be retained to evaluate the circumstance regarding the property and planned development, and to make management decisions regarding documentation of the property.

MM 4.6-2 Prior to the issuance of a grading permit for any future development within the 2010 General Plan Update Study Area, the project applicant shall retain a qualified archaeologist to assess if any of the 18 known archaeological sites identified within the Study Area, or other unknown archaeological sites, may be within the proposed construction impact or buffer zone areas. To the maximum extent feasible, known archaeological sites shall be avoided through project design modifications. If avoidance is not feasible, those sites that will be impact shall be subjected to a Phase II evaluation, which may include further archival research and ethnographic research as well as subsurface testing to determine (1) the horizontal and the vertical extent of a resource; (2) the stratigraphic integrity of a resource; and (3) the density and diversity of artifactual material. The Phase II evaluation shall include a report describing the findings and recommendations for further evaluation if required.

Should the Phase II evaluation identify a significant resource where avoidance and/or preservation are not feasible, a Phase III mitigation or data recovery phase shall be conducted. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO).

Excavated finds shall be offered to the City of Rancho Cucamonga or its designee on a first refusal basis. If the artifacts are refuse, the landowner may retain said finds if the project applicant provides written assurance that they will be properly preserved in the City of Rancho Cucamonga, unless (1) said finds are of special significance or (2) a museum in the City of Rancho Cucamonga indicates a desire to study and/or display them, in which case the items shall be

donated to the City or its designees. If the project applicable provides no such assurance, the City shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation shall be carried out based upon the recommendations in the Phase II Report, and the City of Rancho Cucamonga Planning Director shall make a determination as to the site's disposition based on the recommendation of the qualified archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.

MM 4.6-3 If any prehistoric archaeological resources are encountered before or during grading, the developer will retain a qualified archaeologist to monitor construction activities, to take appropriate measures to protect or preserve them for study. With the assistance of the archaeologist, the City of Rancho Cucamonga will:

- Enact interim measures to protect undesignated sites from demolition or significant modification without an opportunity for the City to establish its archaeological value.
- Consider establishing provisions to require incorporation of archaeological sites within new developments, using their special qualities as a theme or focal point.
- Pursue educating the public about the archaeological heritage of the area.
- Propose mitigation measures and recommend conditions of approval to eliminate adverse project effects on significant, important, and unique prehistoric resources, following appropriate CEQA guidelines.
- Prepare a technical resources management report, documenting the inventory, evaluation, and proposed mitigation of resources within the project area. Submit one copy of the completed report, with original illustrations, to the San Bernardino County Archaeological Information Center for permanent archiving.

MM 4.6-4 If any paleontological resource (i.e. plant or animal fossils) are encountered before or during grading, the developer will retain a qualified paleontologist to monitor construction activities, to take appropriate measures to protect or preserve them for study. The paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:

- Assign a paleontological monitor, trained and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full-time during the interval of earth-disturbing activities.
- Should fossils be found within an area being cleared or graded, divert earth-disturbing activities elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor should immediately divert construction and notify the monitor of the find.

- Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (i.e., San Bernardino County Museum).
- Submit summary report to City of Rancho Cucamonga. Transfer collected specimens with a copy to the report to San Bernardino County Museum.

4.6.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Historical Resources

Less Than Significant With Mitigation.

Archaeological Resources

Less Than Significant With Mitigation.

Paleontological Resources

Less Than Significant With Mitigation.

Human Remains

Less Than Significant.

Cumulative Impacts

Less Than Significant With Mitigation.

4.7 GEOLOGY AND SOILS

This section analyzes the potential seismic and geologic hazards that may result from buildout of the City of Rancho Cucamonga 2010 General Plan Update and is based on a review of existing documents and studies for the project area, as noted throughout this section.

4.7.1 RELEVANT POLICIES AND REGULATIONS

Laws, regulations, and codes have been established to ensure that proper precautions are taken in advance of development to prevent unreasonable levels of damage, injuries, or fatalities from seismic or geologic hazards. The primary regulatory measures include:

- International Building Code
- Alquist-Priolo Special Studies Zones Act/Alquist-Priolo Earthquake Fault Zoning Act
- Unreinforced Masonry Law
- Seismic Hazards Mapping Act
- Natural Hazards Disclosure Act
- California Building Code
- San Bernardino County's Soil Erosion Control Ordinance
- City of Rancho Cucamonga Municipal Code

Federal

International Building Code

The International Building Code (IBC) is the national model building code. The 2006 IBC is the most recent edition of the International Building Code, which was incorporated into the 2007 California Building Code, and currently applies to all structures being constructed in California (ICC 2008). The national model codes are incorporated by reference into the building codes of local municipalities, such as the California Building Code and Rancho Cucamonga's Building Code and are discussed below.

State

Alquist-Priolo Earthquake Fault Zoning Act

The 1971 San Fernando Earthquake in Southern California resulted in the development of the Alquist-Priolo Special Studies Zones Act of 1972. The Act was renamed in 1994 to the Alquist-Priolo Earthquake Fault Zoning (A-P) Act. The *California Department of Mines and Geology (CDMG) Special Publication 42* includes the provisions of the Act and an index to maps of Earthquake Fault-Rupture Zones (formerly Alquist-Priolo Special Study Zones), as well as current revisions to these two documents (including Supplements 1 and 2 added in 1999 and Supplement 3 added in 2003).

Earthquake fault-rupture zones have been delineated to prevent the construction of urban development across the trace of active faults. The boundary of the fault zone is approximately 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The State Geologist defines an active fault as a fault that has previously had surface displacement within the Holocene Period (the last 11,000 years). A potentially active fault is defined as any fault that has had surface displacement during Quaternary time (last 1,600,000 years) but not within the Holocene period.

Land subdivisions and habitable structures consisting of four units or more that are proposed within A-P zones are required to have detailed fault investigations performed so that engineering geologists can mitigate the hazards associated with active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (*Public Resources Code*, Chapter 7.8, Section 2690–2699.6) directs the State of California Department of Conservation to identify and map areas subject to earthquake hazards (such as liquefaction, earthquake-induced landslides, and amplified ground shaking). Passed by the State legislature after the 1989 Loma Prieta earthquake, the Seismic Hazards Mapping Act was aimed at reducing the threat to public safety and minimizing potential loss of life and property in the event of a damaging earthquake event. A product of the resultant Seismic Hazards Mapping Program, Seismic Zone Hazard Maps identify Zones of Required Investigation, which are those with potential seismic hazards; most developments designed for human occupancy planned within these zones are subject to site-specific geotechnical investigations to identify the hazard and to develop appropriate mitigation measures prior to permitting by local jurisdictions.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act (effective June 1, 1998) requires that sellers of real property and their agents provide prospective buyers with a disclosure statement when the property is located within one or more State-mapped hazard areas, including a Seismic Hazard Zone.

California Building Code

The California Building Code (CBC) is promulgated under the *California Code of Regulations* (CCR), Title 24, Parts 1 through 12 (also known as the California Building Standards Code), and is administered by the California Building Standards Commission (CBSC). The CBSC is responsible for administering California's building codes, including adopting, approving, publishing, and implementing codes and standards. The CBC is a compilation of three types of building standards from three different origins:

- Standards adopted by State agencies without change from the national model codes (e.g., the IBC).
- Standards adopted and adapted from the national model code standards to meet California conditions.
- Standards authorized by the California legislature that constitute extensive additions that are not covered by the national model codes and that are adopted to address concerns particular to California (e.g., the specification of Certified Engineering Geologist rather than engineering geologist).

The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. Facilities and structures such as power plants, freeways, emergency management centers (e.g., traffic management and 911 centers), and dams are regulated under criteria developed by various California and Federal agencies. The current version of the CBC is the 2007 triennial edition (CBSC 2009).

Regional

Santa Ana Region Basin Plan

The City of Rancho Cucamonga is located within the Santa Ana River watershed, where the Santa Ana Regional Water Quality Control Board (RWQCB) imposes minimum lot size requirements for new developments using on-site septic tanks or subsurface leaching/percolation systems. Chapter 5 of the Santa Ana Region Basin Plan outlines the Board's regulations for septic systems, which specifically limit the density of new subsurface systems to lots developed with no more than two dwelling units per acre and prohibits these systems in specific areas with water quality problems and where public sewer systems are in place. Exemptions to the minimum lot size are granted for replacement systems, residential expansion, and where offsets are made (when a number of existing dwelling units on septic systems are connected to the public sewer system in exchange for an equal number of new units to be placed on septic systems).

County

Soil Erosion Control Ordinance

The County's Ordinance for soil erosion and dust control is contained in Chapter 88.02 the San Bernardino County Development Code (Title 8 of the County Code). The County has designated the unincorporated areas near Rancho Cucamonga as soil erosion hazard areas, where individual property owners must make reasonable efforts to prevent dust from blowing off their property. A soil erosion permit is required for any ground disturbance (excavating, leveling, cultivating, disking, plowing, removing residues, or spreading a soil) and for recreational use of off-road vehicles, but exempts activities such as roadway or utility line construction and maintenance, land clearing for fire prevention, soil testing, disturbance of one acre or less, use of a Noble blade within a vineyard, and agricultural practices within an agricultural preserve.

Septic Tank Regulations

Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code contains regulations for the installation, use and maintenance of sewage holding tanks so as not to affect public health or safety. The County Division of Environmental Health Services (DEHS) is responsible for issuing permits to construct and use septic tanks, as well as to routinely inspect the tanks for proper operation.

If a sewage collection line becomes available near a property utilizing a septic tank, the property owner is required to connect to the sewer line within 90 days and to abandon the septic tank in accordance with County regulations.

Local

Alquist-Priolo Act Modifications

The City of Rancho Cucamonga has adopted more stringent standards than the A-P Act to address seismic hazards in the City. It has expanded the A-P Zone for the Cucamonga Fault to include the area around a splay¹ at the northwestern corner of the City; in this area, geotechnical investigations are required for new developments to determine the presence of a fault trace and to require setbacks from the trace. The City has also extended the A-P Zone for

¹ A secondary fault branching off the main fault.

the Red Hill Fault to include the segments along the scarp at Red Hill and the areas where a buried or uncertain segment is located. This area also requires geotechnical investigations to determine the presence of a fault trace. In addition, the City requires geotechnical investigations for all habitable structures proposed within the expanded Cucamonga Fault Zone and in the northeastern and (extended) southwestern segments of the Red Hill Fault Zone (i.e., not just developments with four units or more, as required under the A-P Act). For the central buried segment of Red Hill, the City-designated zone requires geotechnical investigations for essential and critical facilities (i.e., fire stations, hospitals, emergency operations centers, schools, shelters, communication centers, and other facilities that are needed during an emergency) and the strengthening of foundations of essential and critical facilities in this zone.

Rancho Cucamonga Building Regulations

Building regulations in Rancho Cucamonga are specified in Title 15, Buildings and Construction of the Municipal Code, which includes adoption of the 2007 CBC which, in turn, incorporates the International Building Code. Building construction is governed by the CBC; however, the City has amended and provided exemptions to the CBC that address specific geologic considerations in the City. This title also includes regulations for earthquake hazard reduction in unreinforced masonry (URM) buildings, including historic buildings. This title is enforced by the Building and Safety Division; it requires site-specific investigation, and it establishes construction standards and inspection procedures to ensure that development does not pose a threat to public safety. According to the City of Rancho Cucamonga Building Department, no URMs exist within the Study Area (Thomas 2009).

Blowsand Regulations

The City has adopted specific regulations to address soil/wind erosion and blowsand hazards (which are caused by Santa Ana wind conditions) within the City limits. These regulations are found in Title 8, Health and Safety - Chapter 8.16 of the Rancho Cucamonga Municipal Code. The regulations adopt the County's Soil Erosion Control Ordinance, as contained in Chapter 88.02 the San Bernardino County Development Code.

Grading Ordinance

The City's Grading Ordinance is contained in Title 19, Environmental Protection - Chapter 19.04 of the Rancho Cucamonga Municipal Code. Title 19 discourages mass grading and excessive slopes so as to retain the natural terrain; to preserve significant topographic features; to limit construction on identified seismic or geologic hazard areas; and to encourage variations in housing styles, lot sizes, design densities, and views. The ordinance calls for grading plans to be reviewed by a committee consisting of one representative from the Building and Safety Department, one representative from the Engineering Department, and one representative from the Planning Department. This committee reviews all grading plans for compliance with City standards and guidelines relating to grading practices for topography, drainage structures, slopes, irrigation, planting, building pad differential heights, accessibility, and other features or functions that meet the objectives of this ordinance.

Hillside Development Regulations

The City's Development Code contains hillside development regulations in Chapter 17.24 of Title 17 to prevent the disturbance of natural slopes. Guidelines and development standards for site design, architecture, driveways/roadways, walls and fences, landscaping, grading, drainage, trails and corrals, public safety, and development density are provided in the regulations, for use in the review of developments on sites with slopes of 5 percent or greater.

Grading for development is permitted in areas with slopes of 5 to 7.99 percent, but the natural character of landforms must be retained. Contour grading, combined slopes, limited cut and fill, split-level architectural prototypes, or padding for the structures may be required to reduce grading. Cluster development is encouraged to reduce areas of disturbance.

Development within the Hillside Overlay District (areas generally located north of Hillside Avenue and areas around Red Hill and Beryl Hill) or areas with slopes 8 to 14.9 percent are required to comply with hillside architectural and design techniques that minimize grading. The use of split-level foundations of greater than 18 inches, stem walls, stacking, and clustering is expected for these areas.

Development in areas with slopes of 15 to 29.9 percent is limited to the less visually prominent slopes and where it can be shown that safety, environmental, and aesthetic impacts can be minimized. Large lots, variable setbacks, and variable building structural techniques (i.e., stepped or pole foundations) are expected. Structures should blend with the natural environment in terms of shape, materials, and colors. Roadways should follow natural contours or use grade separations.

Development is prohibited in areas with slopes over 30 percent or greater, unless the site is south of Banyan Street where development is allowed, at least 75 percent of the lots or parcels of the development are surrounded by lots or parcels improved with structures, and where the proposed development appropriately addresses slope stability and other on-site geological factors.

The Development Code also includes a Hillside Residential District (Chapter 17.18), which applies to the northwestern corner of the City and some areas within its SOI. This district permits single-family residential dwellings at a maximum density of two units per acre. Non-residential uses are not allowed. Environmental studies and investigations are required prior to development to address geology, hydrology, seismicity, slope and soil conditions, access/circulation, and biological resources and to determine the buildable area and allowable development density. Compliance with the hillside development regulations in Chapter 17.24 is mandated.

4.7.2 EXISTING CONDITIONS

Regional Geology

The City of Rancho Cucamonga is located at the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains. The Chino Valley is bound by the San Gabriel Mountains to the north, the San Bernardino Mountains to the northeast, the Puente Hills to the southwest, and the Jurupa Hills to the southeast.

The San Gabriel Mountains extend from the Newhall Pass in Los Angeles County, east to the Cajon Pass in San Bernardino County. This mountain range has the steepest and most rugged topography in the region, with peaks exceeding 9,000 feet above mean sea level (msl), with the highest point at 10,064 feet above msl at Mount Baldy. These mountains are part of the Transverse Ranges and are composed of igneous and metamorphic rocks that were formed over 65 million years ago. Streams from the mountains carried alluvial deposits down into the valley, with deposits consisting of coarse gravels to fine-grained sands deposited more than 10,000 years ago. The alluvial deposits are as thick as 500 to 1,000 feet at the southern edges of the mountains, with deposits southeast of Red Hill nearly 1,400 feet thick. Underneath the alluvial sediments are crystalline rocks, as found exposed in the San Gabriel Mountains north of the City (ECI 2000).

Seismicity

Southern California is a seismically active region, with seismic hazards depending on (1) proximity and earthquake potential of nearby active faults and (2) the local geologic and topographic conditions, which can either amplify or attenuate seismic waves.

The City of Rancho Cucamonga is located in the northern portion of the Peninsular Ranges geomorphic province, just south of the Transverse Ranges province. At the boundary of the provinces are several thrust faults, where large-scale crustal disturbance has occurred as the Peninsular Ranges collide with the Transverse Ranges. The compressional forces of this collision are responsible for the uplift of the San Gabriel Mountains. Exhibit 4.7-1, Fault Locations, depicts the general location of locally known and active faults in the region.

Magnitude and intensity are used to measure earthquakes, where magnitude is a measure of the energy released at the source of the earthquake (as determined from measurements on seismographs), while intensity is a measure of the strength of shaking produced by the earthquake at a given location. Several scales are used to measure magnitude, including (1) local magnitude (ML), also referred to as “Richter magnitude”, (2) surface-wave magnitude (Ms), (3) body-wave magnitude (Mb), and (4) moment magnitude (Mw). All magnitude scales yield approximately the same value for any given earthquake, and are based on the size of the seismic wave, its frequency, size and area of displacement, and rigidity of the earth. Table 4.7-1 provides the classes of earthquakes based on magnitude.

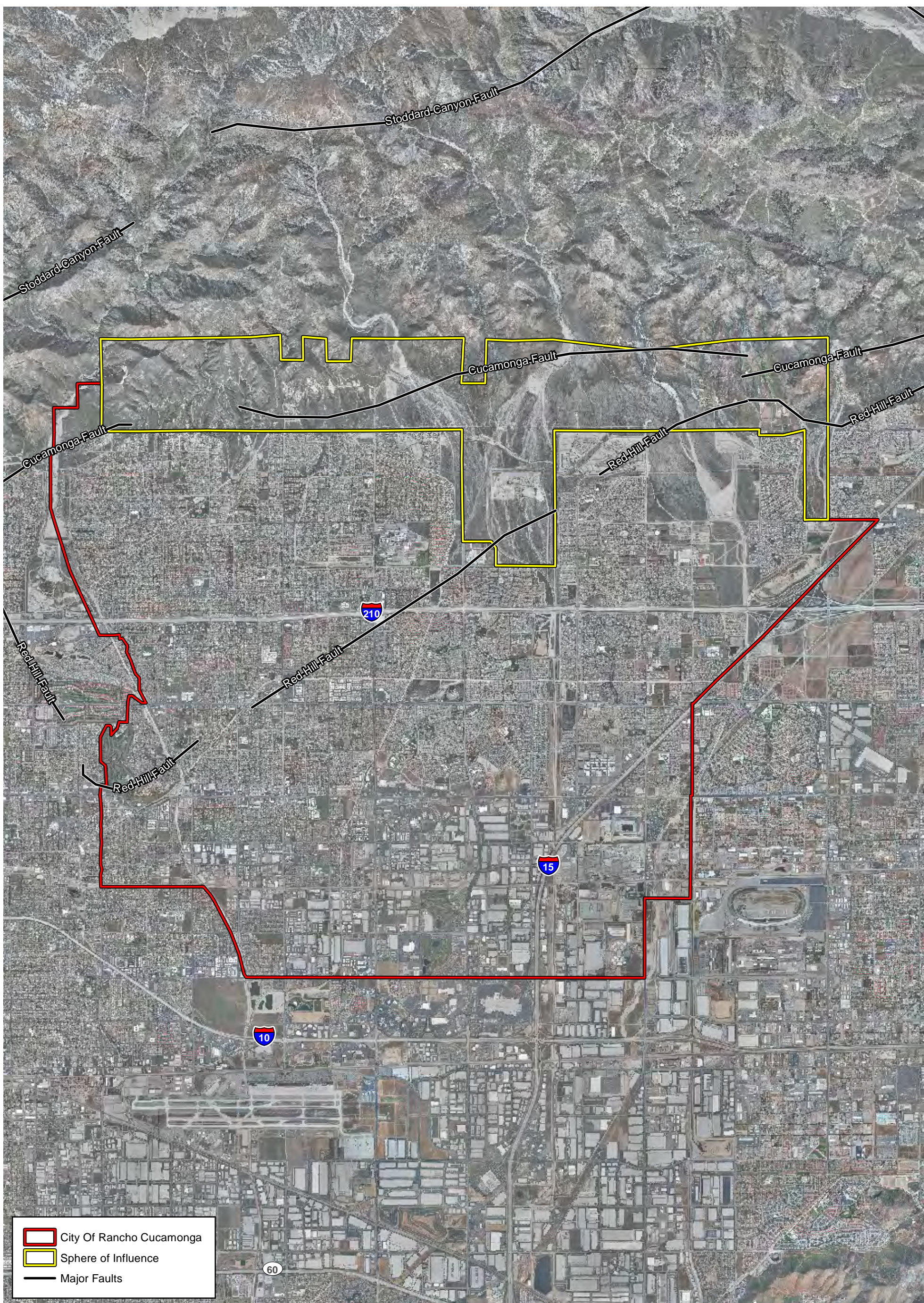
**TABLE 4.7-1
EARTHQUAKE MAGNITUDE**

Magnitude Class	Magnitude
Great	$M \geq 8$
Major	$7 < M < 7.9$
Strong	$6 < M < 6.9$
Moderate	$5 < M < 5.9$
Light	$4 < M < 4.9$
Minor	$3 < M < 3.9$
Micro	$M < 3$
Source: USGS 2009.	

The Red Hill Fault is known as the geologic divide between the Cucamonga and Chino groundwater basins, as it curves around the southern portion of Red Hill in the northern section of the City. This fault is defined by a prominent scarp in the alluvial fan south of Day Canyon and at the southern edge of Red Hill. A large number of small earthquakes (magnitudes [M] 1 to 3) have historically occurred beneath the City of Rancho Cucamonga, some which have epicenters on or near the trace of the Red Hill Fault. A maximum credible magnitude of 6.5 is possible on this fault (ECI 2000).

The Red Hill fault consists of three segments:

- **Etiwanda Avenue Fault Scarp.** The northeastern segment of the Red Hill Fault (mapped near Etiwanda Avenue) has been shown to be active and may be a splay of the Cucamonga fault. This segment has been included in an Alquist-Priolo Earthquake Hazard Zone. Special studies are required along the Etiwanda segment for any structure proposed for human occupancy (ECI 2000).



Fault Locations

Rancho Cucamonga General Plan Update

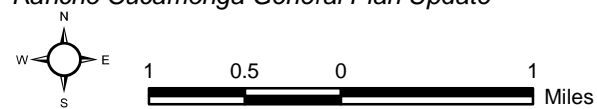


Exhibit 4.7-1



- **Scarp at Red Hill.** Several studies completed in the area suggest the presence of a fault at the southern base of Red Hill; however, these studies were unable to determine whether or not the fault was active. The scarp is on trend with the Etiwanda Avenue scarp, which is active, as well the San Jose fault, which caused the 1988 and 1990 Upland earthquakes. This segment is not within the State-designated Earthquake Hazard Zone (ECI 2000).
- **Buried/Uncertain Segment of the Red Hill Fault.** This central segment is drawn on published maps to connect the Red Hill and Etiwanda Avenue scarps, as well as to account for ground water level differences between several wells in the City. Published locations for this segment of the Red Hill fault vary by as much as 1,000 feet, and subsurface explorations for the fault found no evidence of its existence. Because the data cannot support this segment's existence and/or location, this segment is not within the State-designated Earthquake Hazard Zone (ECI 2000).

The City is located just south of the Cucamonga Fault, which runs along the base of the San Gabriel Mountains near the boundary between the Peninsular and Transverse Ranges. The Cucamonga Fault is considered the eastern extension of the Sierra Madre Fault and dips to the north at about 45 degrees. This fault has scarps that indicate offset in recent alluvial deposits along the northern edge of the City. It has been mapped along the base of the San Gabriel Mountains, from the Lytle Creek area to the San Antonio Canyon, as a single line near Cucamonga Creek to a zone that is ½ mile wide, with a significant offset across the Deer Creek alluvial deposits. This segment is within the State-designated Earthquake Hazard Zone. A maximum credible earthquake of M 7.0 is possible on this fault. A worst-case scenario for an M 7.0 earthquake on the Cucamonga Fault is expected to cause ground displacements of up to 9 feet along the fault scarps, with intense ground shaking lasting more than 30 seconds (ECI 2000).

Exhibit 4.7-2, Earthquake Hazard Zones, shows the State-designated Earthquake Hazard Zone for the Red Hill and Cucamonga Faults within the City and SOI.

Other nearby faults include:

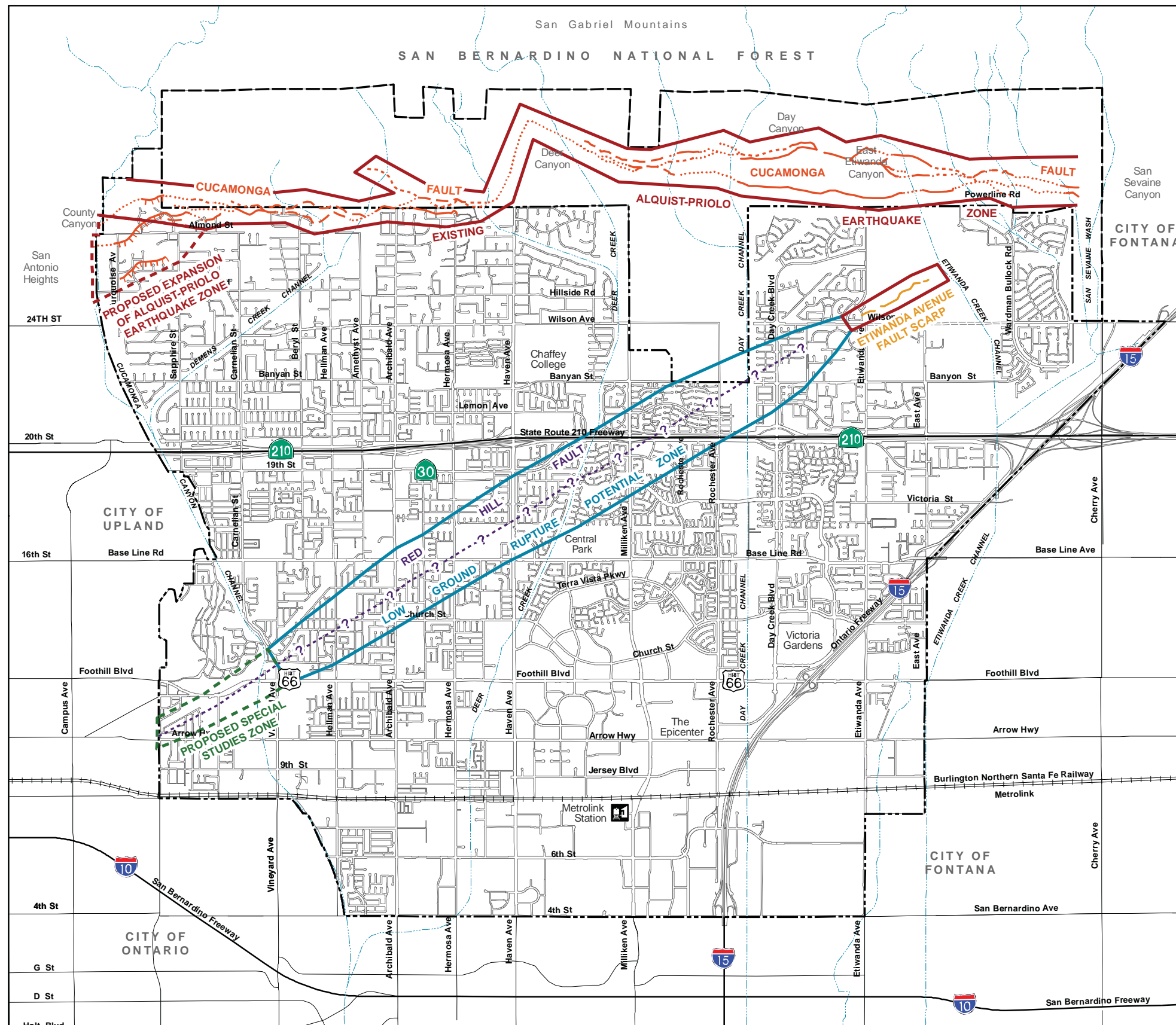
- **San Andreas Fault.** The San Andreas Fault is the boundary between the Pacific and North American plates and is widely recognized as the longest and most active fault in California. It has been mapped from Cape Mendocino in Northern California to an area near the Mexican border, with the nearest segment located 14 miles from the City. The San Andreas Fault is known to be active from historic earthquakes, which have caused surface rupture and displacement of recent sediments. A maximum credible earthquake of M 7.8 is possible on this fault. The probability of an earthquake event of M 7.3 along the San Andreas Fault is about 50 percent over the next 50 years. This event would result in extensive ground shaking in the City, resulting in damage to vulnerable structures and localized ground failures (ECI 2000).
- **San Jacinto Fault.** The San Jacinto Fault includes several northwest-southeast trending fault segments that extend approximately 130 miles from its intersection with the San Andreas Fault (near in the Lytle Creek area at the San Gabriel Mountains), southward to El Centro in Imperial County near the Mexican border and beyond. This right lateral, strike-slip fault has been active in historic time, with earthquakes of M 6.0 to 7.1 occurring since the 1800s. The branch of the San Jacinto Fault nearest to the City is the Lytle Creek Fault, which forms the western side of Lytle Creek Canyon, northeast of the City. A maximum credible earthquake of M 6.7 to 6.9 is possible on this fault (ECI 2000).

- **Whittier-Elsinore-Chino Fault.** The Whittier-Elsinore-Chino Fault is located in the Puente Hills and Chino Hills area, approximately 20 miles southwest of Rancho Cucamonga. The Elsinore Fault branches into the Whittier Fault near Santa Ana Canyon, where it borders the Puente Hills to the southwest and the Chino Fault, which is buried along most of its length, to the northeast. This fault has caused vertical displacements, unlike the horizontal movements associated with the San Andreas and the San Jacinto Faults. A maximum credible earthquake of M 6.8 is possible on this fault (ECI 2000).
- **San Jose Fault.** The San Jose Fault is a potentially active fault extending from south of the San Gabriel Mountains to the San Jose Hills and is associated with the Walnut Creek Fault. It is located 2.5 miles west of the City as it runs southwest from the San Antonio Canyon. It was the source of the Upland earthquakes in 1988 and 1990. This fault is considered a major active fault and is capable of producing an M 6.5 earthquake (ECI 2000).
- **Sierra Madre Fault.** The Sierra Madre Fault system is thought to extend over 100 miles from San Fernando to the Cajon Pass, generally running along the base of the San Gabriel Mountains. It extends west from the Cucamonga Fault at San Antonio Canyon. This fault is considered potentially active and is capable of producing an M 7.0 earthquake (ECI 2000).

Seismic Hazards

Ground rupture may occur on any of the faults listed above, with the Red Hill Fault and the Cucamonga Fault presenting ground rupture hazards to the City of Rancho Cucamonga.

Ground shaking is the movement of the earth as a result of an earthquake. An earthquake event on any fault in the Southern California region could cause ground shaking in the City. Peak ground acceleration and seismic intensity from earthquake events decrease with increasing distance from the earthquake epicenter, and local conditions could amplify or weaken seismic waves. The most common seismic intensity scale is the Modified Mercalli Intensity (MMI), which qualifies the seismic ground shaking at a site according to the magnitude of the earthquake, distance to epicenter, type of bedrock or underlying soils, and topographic conditions. Table 4.7-2 presents the MMI scale. Nearby earthquake faults are listed in Table 4.7-3, along with their Maximum Credible Earthquake (MCE) and associated MMI.



Legend

Fault Zones

- Existing Alquist-Priolo Earthquake Zone *
- - - Proposed Expansion of Alquist-Priolo Earthquake Zone *
- - - Proposed Special Studies Zone *
- Low Ground Rupture Potential Zone **

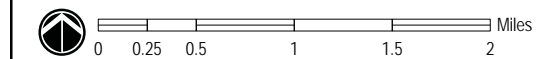
* All proposed structures for human occupancy within these zones shall require special fault hazard studies.
 ** Associated with the uncertain segment of Red Hill Fault, special studies/foundations recommended for essential/critical facilities.

Active Faults

- Cucamonga Fault**
- Fault Accurately Located
 - - - Fault Approximately Located
 - ... Fault Inferred
 - ... Fault Concealed
 - ||||| Fault Scarp (ticks indicate downthrown side)
- Etowanda Avenue Fault Scarp**
- Fault Accurately Located
- Red Hill Fault**
- ... Fault Inferred
 - ? - Fault Queried (uncertain)

Base Map

- - - Rancho Cucamonga City Boundary
- - - Sphere of Influence



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Earthquake Hazard Zones

Rancho Cucamonga General Plan Update

Source: City of Rancho Cucamonga, 2008, Earth Consultants International, 2000

Exhibit 4.7-2



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**TABLE 4.7-2
MODIFIED MERCALLI INTENSITY SCALE**

Intensity Value	Description	Average Peak Velocity	Average Peak Acceleration
I	Not felt except by a very few under especially favorable circumstances.		
II	Felt only by a few persons at rest, especially on upper floors of high-rise buildings; delicately suspended objects may swing.		
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake; standing automobiles may rock slightly, vibration like passing of truck; duration estimated.		
IV	During the day, felt indoors by many, outdoors by few; at night, some awakened; dishes, windows, doors disturbed; walls make creaking sound; sensation like a heavy truck striking building; standing automobiles rock noticeably.	1–2 cm/sec	0.015–0.02g
V	Felt by nearly everyone, many awakened; some dishes, windows and so on broken; cracked plaster in a few places; unstable objects overturned; disturbances of trees, poles, and other tall objects sometimes noticed; pendulum clocks may stop.	2–5 cm/sec	0.03–0.04g
VI	Felt by all, many frightened and run outdoors; some heavy furniture moved; a few instances of fallen plaster and damaged chimneys; damage slight.	5–8 cm/sec	0.06–0.07g
VII	Everybody runs outdoors; damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary structures, considerable in poorly built or badly designed structures; some chimneys broken; noticed by persons driving cars.	8–12 cm/sec	0.10–0.15g
VIII	Damage slight in specially designed structures, considerable in ordinary substantial buildings with partial collapse, great in poorly built structures; panel walls thrown out of frame structures; fall of chimneys, factory stacks, columns, monuments, and walls; heavy furniture overturned; sand and mud ejected in small amounts; changes in well water; persons driving cars disturbed.	20–30 cm/sec	0.25–0.30g
IX	Damage considerable in specially designed structures, well designed frame structures thrown out of plumb, great in substantial buildings with partial collapse; buildings shifted off foundations; ground creaked conspicuously; underground pipes broken.	45–55 cm/sec	0.50–0.55g
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations, ground badly cracked; rails bent; landslides considerable from river banks and steep slopes; shifted sand and mud; water splashed, slopped over banks.	More than 60 cm/sec	More than 0.60g
XI	Few, if any, masonry buildings remain standing; bridges destroyed; broad fissures in ground; underground pipelines completely out of service; earth slumps and land slips in soft ground, rails bent greatly.	-	-
XII	Damage total; waves seen on ground surface; lines of sight and level distorted; objects thrown into air.	-	-
cm/sec: centimeters per second; g: gravity (an earthquake measurement equal to 9.8 meters per second ²) -: No data provided in the ECI report.			
Source: ECI 2000.			

**TABLE 4.7-3
NEARBY FAULTS**

Fault Name	Distance to City	Maximum Credible Earthquake	Peak Ground Acceleration	Modified Mercalli Intensity*
Cucamonga	0–11 miles	M 7.0	0.24–0.60g	IX–X
San Andreas				
Coachella Segment	14–19 miles	M 7.4	0.14–0.28g	VIII–X
San Bernardino Mtns Segment	14–19 miles	M 7.3	0.13–0.26g	VIII–X
Mojave Segment	15–21 miles	M 7.1	0.11–0.20g	VII–VIII
San Andreas - 1857 Rupture	15–21 miles	M 7.8	0.17–0.31g	VIII–IX
San Jacinto				
San Bernardino Segment	9–15 miles	M 6.7	0.12–0.26g	VII–VIII
San Jacinto Valley	14–23 miles	M 6.9	0.10–0.16g	VII–IX
San Jose	4–14 miles	M 6.5	0.13–0.52g	VIII–X
Sierra Madre	7–17 miles	M 7.0	0.14–0.44g	VIII–X
Whittier-Chino –Elsinore				
Chino- Central Avenue	5–14 miles	M 6.7	0.19–0.42g	VIII–X
Whittier	11–17 miles	M 6.8	0.14–0.18g	VIII
Glen-Ivy	12–17 miles	M 6.8	0.13–0.17g	VIII
Clamshell-Sawpit	16–26 miles	M 6.5	0.05–0.15g	VI–VIII
Elysian Park Thrust	21–28 miles	M 6.7	0.08–0.16g	VII–VIII
Cleghorn	16–21 miles	M 6.5	0.06–0.13g	VI–VIII
North Frontal Fault Zone	21–28 miles	M 7.0	0.07–0.15g	VI–VIII
M: Magnitude in Moment Magnitude Scale (Mw); g: gravity (an earthquake measurement equal to 9.8 meters per second ² * see Table 4.7-2 for descriptions.				
Source: ECI 2000.				

Liquefaction is the process by which sediment that is very wet starts to behave like a liquid. Liquefaction typically occurs when loose, sandy soils in areas with groundwater within 50 feet of the surface are subject to strong ground shaking (over 0.2g). The California Geological Survey (CGS) maps for liquefaction hazards have not been completed for the City. While the City has loose sandy soils over large areas, groundwater is generally 350 feet or more below the ground surface. A review of high groundwater depths in the City shows three small areas - south of Base Line Road, west of Hellman Avenue, and north of the Red Hill Fault - where groundwater is within 50 feet of the surface due to impediments to groundwater flow. However, regional mapping indicates that much of the sediment in these areas may be too dense to liquefy (ECI 2000).

Ground accelerations in the City over 0.10g (as expected from a maximum credible earthquake on the Cucamonga, San Andreas, San Jacinto, San Jose, Sierra Madre, and Whittier-Chino-Elsinore Faults) may induce rock falls and landslides from the San Gabriel Mountains. Areas susceptible to rock fall hazards during an earthquake are located below steep, resistant outcrops of relatively well-cemented soil materials. These materials underlie the SOI north of the City. The rock fall hazard is considered high for developments just south of these outcrops, as well as for those located adjacent to steeply ascending slopes (ECI 2000).

The potential for seismic settlement is based on the intensity and duration of ground shaking and the relative density of the subsurface soils. Most of the City is susceptible to seismic settlement, since the alluvial fans underlying the City are of low density. However, as previous earthquakes have shown, seismic settlement is primarily damaging in areas subject to differential settlement, which occurs slowly and can cause significant building damage over

time. In the City, differential settlement is most likely to occur in areas with different soil foundations due to cut and fill and may occur at the base of hillsides (ECI 2000).

Local Geology

The City of Rancho Cucamonga is underlain by the following five geologic deposits (ECI 2000):

- Metamorphic basement rock of the eastern San Gabriel Mountains;
- Older alluvium underlying the Red Hill area;
- Alluvial fan deposits ranging from Pleistocene to recent times;
- Alluvial deposits in modern washes; and
- Windblown sands underlying the south-central portion of the City.

The City has a moderately sloping terrain from north to south, although much of the SOI features steep hillsides and rugged terrain. Ground elevations range from approximately 1,015 feet above msl at the southwestern end of the City to approximately 2,200 feet above msl at the northern end of the City. Within the SOI, the terrain rises to 4,040 feet above mean sea level and features several canyons and bluffs.

The United States Department of Agriculture's (USDA) Soil Survey of San Bernardino County, Southwestern Part (1980) identifies soils in the City as Delhi fine sands, Tujunga soils, Hanford soils, and Soboba soils. Exhibit 4.7-3, Soil Associations, shows soils in the project area.

Delhi fine sands (Db) are found in the southern section of the City and consist of pale brown and light yellowish-brown fine sand. These sands are more than 60 inches thick and are highly permeable so runoff on these soils is very slow. Hazards related to blowing soil for Delhi sands are generally moderate, but can be high in unprotected areas. These soils are used mainly for grapes, pasture plants, alfalfa, and some citrus. Delhi sands have low shrink-swell potential and are considered non-plastic (i.e., they have no clay content). They have slight limitations for dwellings without basements and septic tank absorption fields, with severe limitations for shallow excavations and sanitary landfills due to side wall stability and rapid permeability, respectively. These soils are poor sources of cover material and topsoil, but good sources of sand and road fill.

Tujunga loamy sands (TuB) are found at the central and eastern sections of the City and consist of brown loamy sand and pale-brown coarse sand. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans. Tujunga soils are slightly acidic and highly permeable so runoff on these soils is slow to very slow. Hazards from water erosion are slight and hazards from wind erosion are moderate to high on bare soils. These soils are used mainly for irrigated crops such as citrus, grapes, small grains, and pasture plants. Tujunga soils have a low shrink-swell potential and are considered non-plastic. They have slight limitations for dwellings without basements and septic tank absorption fields, with severe limitations for shallow excavations and sanitary landfills due to side wall stability and a high level of permeability, respectively. These soils are poor sources of topsoil, sand, and gravel, but are suitable as road fill.

Some areas with Tujunga gravelly loamy sand (TvC) are also present, which has the same characteristics as TuB soils, except for a higher gravel content (15 to 30 percent by volume). These soils are fair sources of sand and gravel.

Hanford soils (HaC) are found at the western section of the City and consist of light brownish-gray coarse sandy loam on the surface, about 10 inches thick. These soils have slow to medium runoff potential and slight to moderate erosion hazard when left unprotected. They are slightly acid or neutral throughout and moderately permeable. These soils are used for irrigated crops like citrus and alfalfa. Hanford soils have low shrink-swell potential and are considered non-plastic. They have slight limitations for dwellings without basements, septic tank absorption fields, and shallow excavations, with severe limitations for sanitary landfills due to moderate permeability. These soils are poor sources of sand and gravel but good sources of cover material, topsoil, and road fill.

Soboba soils that are stony loamy sand (SpC) are found at the northern section of the City and consist of grayish-brown stony loamy sand on the surface, about 10 inches thick, with underlying material of brown very stony loamy sand and very pale brown stony sand about 60 inches thick. These soils are excessively drained and highly permeable. Runoff on these soils is slow and erosion hazard is slight. They have low shrink-swell potential. Soboba soils are used for dry-farmed seeded pasture and citrus.

Soboba soils that are gravelly loamy sand (SoC) are found on some areas at the northern section and contain more gravel than SpC soils. Gravel makes up 40 to 60 percent of volume of SoC soils. They generally have the same characteristics, except that runoff is very slow for SoC soils.

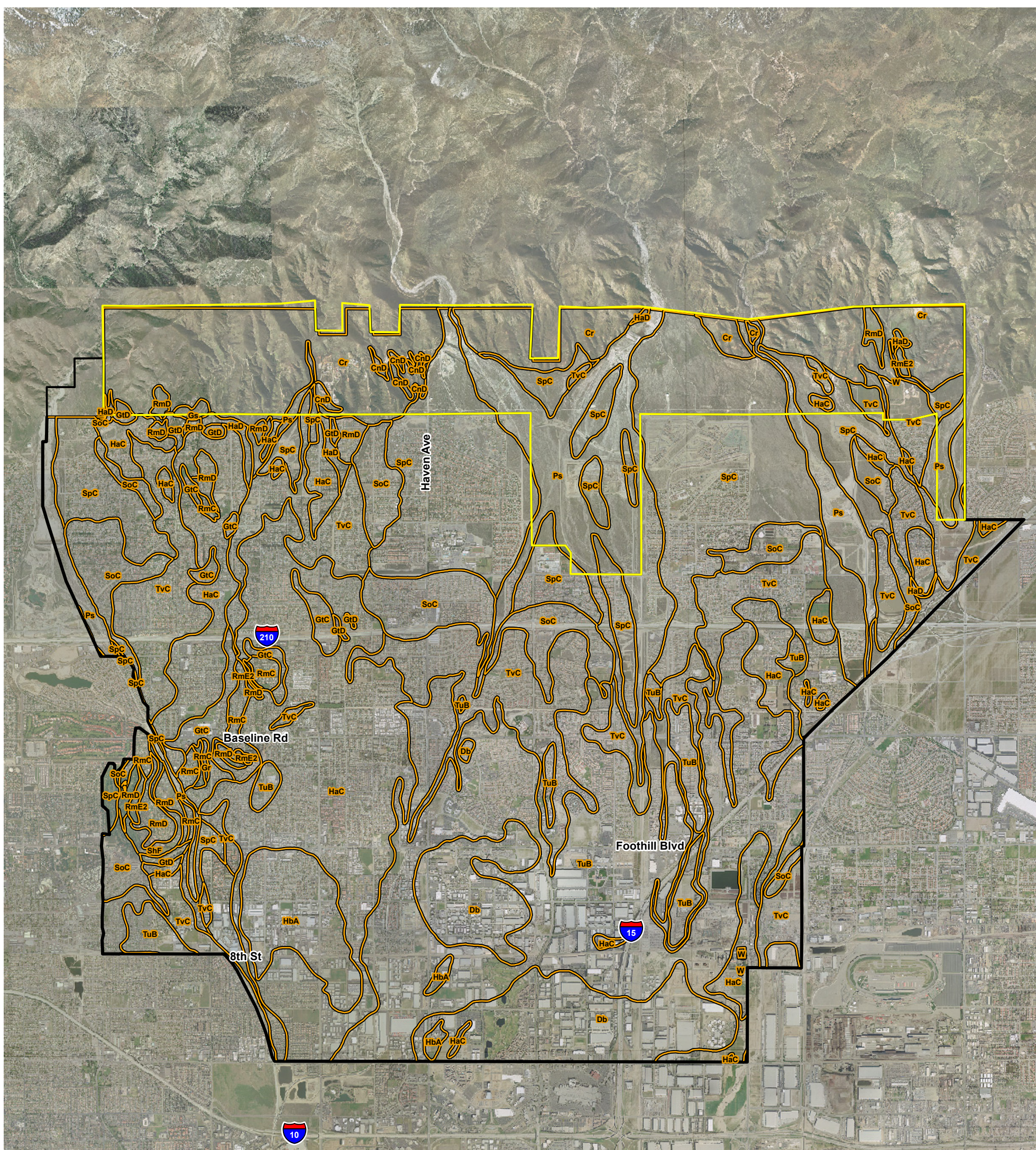
Several other soil types have been mapped in the City and include scattered areas identified as:

- Hanford sandy loam (HbA);
- Hanford coarse sandy loam (HaD);
- Ramona sandy loam, 2 to 9 percent slopes (RmC);
- Ramona sandy loam, 9 to 15 percent slopes (RmD);
- Ramona sandy loam, 15 to 30 percent slopes (RmE2);
- Greenfield sandy loam, 2 to 9 percent slopes (GtC);
- Greenfield sandy loam, 9 to 15 percent slopes (GtD);
- Psamments and Fluvents (Ps) along creeks and drainage courses;
- Cieneba sandy loam (CnD);
- Cieneba Rock outcrop complex (Cr) at the foothills; and
- Grangeville fine sandy loam (Gs).

The soils listed above have low shrink-swell potential. Cieneba and Ramona soils pose severe limitations to septic tank absorption fields (due to the permeability of the soils, depth to water table, and susceptibility to flooding). Cieneba, Hanford, Ramona, and Greenfield soils have a moderate to high erosion hazard.

Geologic Hazards

The geologic hazards in the City of Rancho Cucamonga are directly related to the nearby San Gabriel Mountains. These mountains are considered to be one of the fastest rising, as well as the fastest disintegrating, mountain ranges in the world (ECI 2000). Geologic hazards posed by



City of Rancho Cucamonga

Sphere of Influence

SOIL TYPES

CnD, CIENEBA SANDY LOAM, 9 TO 15 PERCENT SLOPES

Cr, CIENEBA-ROCK OUTCROP COMPLEX

Db, DELHI FINE SAND

Gr, GRANGEVILLE FINE SANDY LOAM

Gs, GRANGEVILLE FINE SANDY LOAM, SALINE-ALKALI

GtC, GREENFIELD SANDY LOAM, 2 TO 9 PERCENT SLOPES

GtD, GREENFIELD FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES

HaC, HANFORD COARSE SANDY LOAM, 2 TO 9 PERCENT SLOPES

HaD, HANFORD COARSE SANDY LOAM, 9 TO 15 PERCENT SLOPES

HbA, HANFORD SANDY LOAM, 0 TO 2 PERCENT SLOPES

Ps, PSAMMENTS AND FLUVENTS, FREQUENTLY FLOODED

RmC, RAMONA SANDY LOAM, 2 TO 9 PERCENT SLOPES

RmD, RAMONA SANDY LOAM, 9 TO 15 PERCENT SLOPES

RmE2, RAMONA SANDY LOAM, 15 TO 30 PERCENT SLOPES, ERODED

ShF, SAUGUS SANDY LOAM, 30 TO 50 PERCENT SLOPES

SoC, SOBOBA GRAVELLY LOAMY SAND, 0 TO 9 PERCENT SLOPES

SpC, SOBOBA STONY LOAMY SAND, 2 TO 9 PERCENT SLOPES

TuB, TUJUNGA LOAMY SAND, 0 TO 5 PERCENT SLOPES

TvC, TUJUNGA GRAVELLY LOAMY SAND, 0 TO 9 PERCENT SLOPES

W, WATER

Soil Associations

Rancho Cucamonga General Plan Update

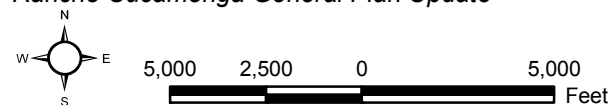


Exhibit 4.7-3

Bonterra
CONSULTING

the mountains include debris flows and rock falls due to erosion of steep slopes, heavy rains, soil collapse, soil expansion, earthquake events, and flooding.

Landslides refer to the ground movement of unstable slopes, and include rock falls, deep failure of slopes, and shallow debris flows. Areas with steep slopes, adverse joints or deep weathering have a potential for failure. Potential landslides or slope failure are expected in areas with steep slopes at the northwestern corner of the City and in the SOI. Slopes steeper than 25 percent are found on Red Hill, along Cucamonga Creek at the City's northwest edge, and at the foothills north of the City.

While the metamorphic basement rock at the hillsides of the City is grossly stable, the steep slopes may cause rocks to fall during an earthquake or intense rainfall. Areas with rock fall hazards are confined to the hillsides at the northern edge of the City and the SOI.

The alluvial fans underlying the City were created by several stream systems from the eastern San Gabriel Mountains. These fans and washes represent debris flow events in the recent geologic period. The San Bernardino County Flood Control District maintains debris basins and flood-control facilities in the area to control debris flows and flooding hazards along the canyons, creeks and washes (ECI 2000).

The Santa Ana winds are strong winds that pass through the Cajon Pass from the mountains and the high desert areas north of the Pass. These winds have led to the deposition of loose soils in the south-central portion of the City. The dry, unconsolidated condition of loose soils makes them susceptible to collapse, hydroconsolidation, and erosion. Bare soils are also subject to blowsand hazards, especially during ground disturbance associated with grading, excavation, trenching, agricultural tilling, and other activities on open land. Wind erosion damages land and vegetation by causing soil loss, dryness, and deterioration of soil structure, nutrient and productivity loss, air pollution, and sediment transport and deposition.

Hydroconsolidation or soil collapse is the rearrangement of grains and loss of cementation of water-saturated soils, resulting in sudden and substantial settlement of soils. This often occurs in arid or semi-arid environments with wind laid sands and silts, alluvial fans and mudflow sediments recently deposited by wind erosion or flash floods. Hazards from collapsible soils are expected in Holocene alluvial fans and washes, and in areas overlain by windblown sands in the south-central section of the City.

Expansive soils are soils with a significant amount of clay particles that have the ability to shrink or swell with water. When these soils swell, they exert pressure on building foundations and may cause damage. Soils in the City and its SOI have relatively low amounts of clay and no soil expansion hazards are present.

Ground subsidence is the gradual settling or sinking of the ground, usually associated with the extraction of oil, gas, or ground water from below the ground surface, or the organic decomposition of peat deposits, with a resultant loss in volume. Subsidence has been observed in the cities of Pomona, Chino and Ontario, generally east of San Antonio Creek, but not in Rancho Cucamonga.

While subsidence may occur throughout an over-drafted (when groundwater pumping exceeds recharge of the underlying aquifer) valley, differential displacement and fissures are more readily apparent at and near the valley margin. Thus, damage from regional subsidence may be expected at the valley margins adjacent to the San Gabriel Mountains and Red Hill (ECI 2000).

4.7.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to geology and soils if it would:

- Threshold 4.7a:** Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) rupture of a known earthquake fault, as delineated on the most recent Earthquake Hazard Fault Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, (ii) strong seismic ground shaking, (iii) seismic-related ground failure, including liquefaction, or (iv) landslides;
- Threshold 4.7b:** Result in substantial soil erosion or the loss of topsoil;
- Threshold 4.7c:** Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Threshold 4.7d:** Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; and/or
- Threshold 4.7e:** Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

4.7.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address geology and soil issues, as well as seismicity in the City. Implementation of these goals and policies and their corresponding implementation actions would reduce seismic and geologic hazards to existing and future developments. These include:

Goal PS-5: Minimize the potential damage to structures and loss of life that may result from earthquakes and other seismic hazards.

Policy PS-5.1: Require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and developmental review process for all structures proposed for human occupancy.

Implementation Action: *Continue to require development proposals to comply with City regulations concerning seismic or geologic hazards, and update the City's requirements related to the Red Hill Fault.*

Policy PS-5.2: Establish minimum setbacks for any structure proposed for human occupancy within the Special Studies Zones identified on the Fault Hazard Map, based on minimum standards established under State law and recommendations of the project geologist and City Engineer.

Implementation Action: *Ensure that development proposals adhere to minimum setback requirements required for Special Studies Zones, and as recommended by a project geologist and accepted by the City Engineer.*

Policy PS-5.3: Promote the strengthening of planned utilities through the Cucamonga Valley Water District's Master Plan, the retrofit and rehabilitation of existing weak structures and lifeline utilities, and the relocation or strengthening of certain critical facilities to increase public safety and minimize potential damage from seismic and geologic hazards.

Implementation Action: *Work with CVWD to expedite the upgrade of critical facilities.*

Policy PS-5.4: Continue to encourage the retrofit of unreinforced masonry buildings and identify other potentially hazardous buildings.

Implementation Action: *Continue to implement the requirements of the City's retrofit ordinance.*

Policy PS-5.5: Continue to incorporate the most recent seismic safety practices into City codes and project review processes.

Implementation Action: *Continue to monitor changes in building code requirements relative to seismic safety; update City ordinances as required in response to changes at the State level.*

Policy PS-5.6: During the environmental and developmental review process, promote alternative project designs that incorporate low-intensity land uses in areas determined to have significant seismic or geologic constraints.

Implementation Action: *Continue to require the submittal and review of geotechnical and seismic studies as part of the development review process to guide development proposals.*

Policy PS-5.7: Promote public awareness of seismic and geologic hazards within the City by requiring property transfer notifications.

Implementation Action: *Continue to make information readily available to realtors to assist with property title disclosure and affirmation of geotechnical and seismic hazards in ownership transfers, as required by State law. Establish educational signs along public trails where the trails cross fault zones.*

Goal PS-6: *Minimize the potential damage to structures and loss of life that may result from geologic hazards.*

Policy PS-6.1: Continue enforcement of the Hillside Development Guidelines to allow for prudent development and redevelopment of all properties located on slopes greater than 10 percent, and continue to preserve as open space properties located on slopes greater than 30 percent.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

Policy PS-6.2: Support mitigation of existing development and private development projects located on unstable hillside areas, especially slopes with recurring failures, where City property or public right-of-way is threatened from slope instability, or where considered appropriate and urgent by the City Engineer, Fire, or Police Departments.

Implementation Action: Continue to monitor and cause the implementation of mitigation measures incorporated into existing developments in the City designed to reduce impacts resulting from geologic hazards.

Policy PS-6.3: Enact a geologic disaster recovery ordinance for use following severe winter storms that cause extensive landslide or erosion damage.

Implementation Action: Adopt an ordinance to address a plan for a geologic disaster recovery.

Policy PS-6.4: Implement a third-party review or similar system for geotechnical reports related to development or redevelopment to verify and document engineering conditions and properties associated with site materials.

Implementation Action: Ensure that third-party or peer-review contracts with engineering professionals are maintained annually for consultation with City staff during the development review process and permit issuance.

Goal PS-8: Minimize the risks associated with wind hazards.

Policy PS-8.3: Require agricultural operations and new construction to comply with City provisions for preventing soil erosion and excessive generation of dust where the property is vulnerable to these conditions.

Implementation Action: Continue to enforce and routinely inspect that mitigation measures and City regulations related to dust control are being employed.

Policy PS-8.4: Enforce contemporary dust control provisions in the City's Development Code.

Implementation Action: Continue to enforce and routinely inspect that mitigation measures and City regulations related to dust control are being employed.

4.7.5 STANDARD CONDITIONS OF APPROVAL

There are existing regulations that reduce geologic and seismic hazards to structures and infrastructure, as discussed above. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for personal injury and property damage associated with geologic and seismic hazards in the City. Existing regulations that promote public safety during major earthquake events or that prevent exposure to local geologic hazards include those standard conditions listed below.

SC 4.7-1 In accordance with the Natural Hazards Disclosure Act, agents and sellers of real property located within a designated Alquist-Priolo Earthquake Hazard Zone shall disclose to any prospective purchaser that the property is within an Earthquake Hazard Zone pursuant to the requirements of the Act.

SC 4.7-2 In accordance with the Alquist-Priolo Earthquake Fault Zone Act, development within the designated Earthquake Fault Zone for the Red Hill Fault and Cucamonga Fault are required to prepare detailed geotechnical investigations for land subdivisions and developments of four units or more. The California Geological Survey (CGS) has developed general guidelines for fault hazard

evaluations, as contained in CGS Note 49. Compliance with the A-P Act would reduce hazards from surface rupture along the Red Hill and Cucamonga Faults.

- SC 4.7-3** Development of projects pursuant to the proposed 2010 General Plan Update shall comply with the City's modifications to the Alquist-Priolo Earthquake Fault Zone Act that call for geotechnical investigations for all proposed structures designed for human occupancy within the expanded A-P Zones, including a zone along a splay of the Cucamonga Fault and another zone along the scarp at Red Hill. Also, geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet.
- SC 4.7-4** In accordance with the City's Building Regulations, as contained in Title 15, Buildings and Construction of the Rancho Cucamonga Municipal Code, which includes adoption of the 2007 California Building Code (CBC), all construction shall comply with the CBC and the amendments and exemptions to the CBC that the City has adopted. This Title requires site-specific investigation and establishes construction standards and inspection procedures to ensure that development does not pose a threat to public safety.
- SC 4.7-5** In hillside areas, residential developments shall be graded and constructed consistent with the standards contained in the Hillside Development Regulations Section 17.24.070.
- SC 4.7-6** Development projects pursuant to the proposed 2010 General Plan Update shall comply with the City's Grading Ordinance which is contained in Title 19, Environmental Protection – Chapter 19.04 of the Rancho Cucamonga Municipal Code and requires the submission of grading plans for approval by the grading committee to ensure that grading activities retain the natural terrain; preserve significant topographic features; and limit construction on identified seismic or geologic hazard areas in the hillside areas of the City.
- SC 4.7-7** Development of projects pursuant to the proposed 2010 General Plan Update shall comply with Title 8, Health and Safety – Chapter 8.16 of the Rancho Cucamonga Municipal Code which adopts the County's Soil Erosion Control Ordinance, as contained in Chapter 88.02 of the San Bernardino County Development Code and requires individual property owners within designated soil erosion hazard areas to make reasonable efforts to prevent dust blowing from their property. Exhibit 4.7-4, Soil Erosion Hazard Area, shows the designated soil erosion hazard area in and near the City of Rancho Cucamonga. Dust-control measures are required for various ground-disturbing activities to prevent dust and debris from affecting adjacent properties during high wind conditions.
- SC 4.7-8** All future building pads shall be seeded and irrigated for erosion control. Detailed plans shall be included in the landscape and irrigation plans to be submitted for Planning Department approval prior to the issuance of building permits.
- SC 4.7-9** A geological report shall be prepared for an individual project by a qualified engineer or geologist and submitted at the time of application for grading plan check.

- SC 4.7-10** The final grading plan, appropriate certifications and compaction reports shall be completed, submitted, and approved by the Building and Safety Official prior to the issuance of building permits.
- SC 4.7-11** A separate grading plan check submittal is required for all new construction projects and for existing buildings where improvements being proposed will generate 50 cubic yards or more of combined cut and fill. The grading plan shall be prepared, stamped, and signed by a California registered Civil Engineer.
- SC 4.7-12** A soils report shall be prepared by a qualified engineer licensed by the State of California to perform such work.
- SC 4.7-13** As required under Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code, the installation, use and maintenance of sewage holding tanks shall be regulated by the County Division of Environmental Health Services (DEHS) so that tanks do not affect public health or safety. The DEHS is responsible for issuing permits to construct and use septic tanks, as well as to routinely inspect the tanks for proper operation. Under this regulation, if a sewage collection line becomes available to a property served by a septic tank, the property owner shall connect to the sewer line within 90 days and to abandon the septic tank in accordance with County regulations.
- SC 4.7-14** Development of projects pursuant to the proposed 2010 General Plan Update shall comply with Chapter 5 of the Santa Ana Region Basin Plan which states that the use of septic systems within the Santa Ana River watershed shall be limited to lots developed with no more than two dwelling units per acre and prohibits these systems in specific areas with water quality problems and where public sewer systems are in place.
- SC 4.7-15** For projects using septic tank facilities, written certification of acceptability, including all supportive information, shall be obtained from the San Bernardino County Department of Environmental Health and submitted to the Building Official prior to the issuance of Septic Tank Permits, and prior to issuance of building permits.

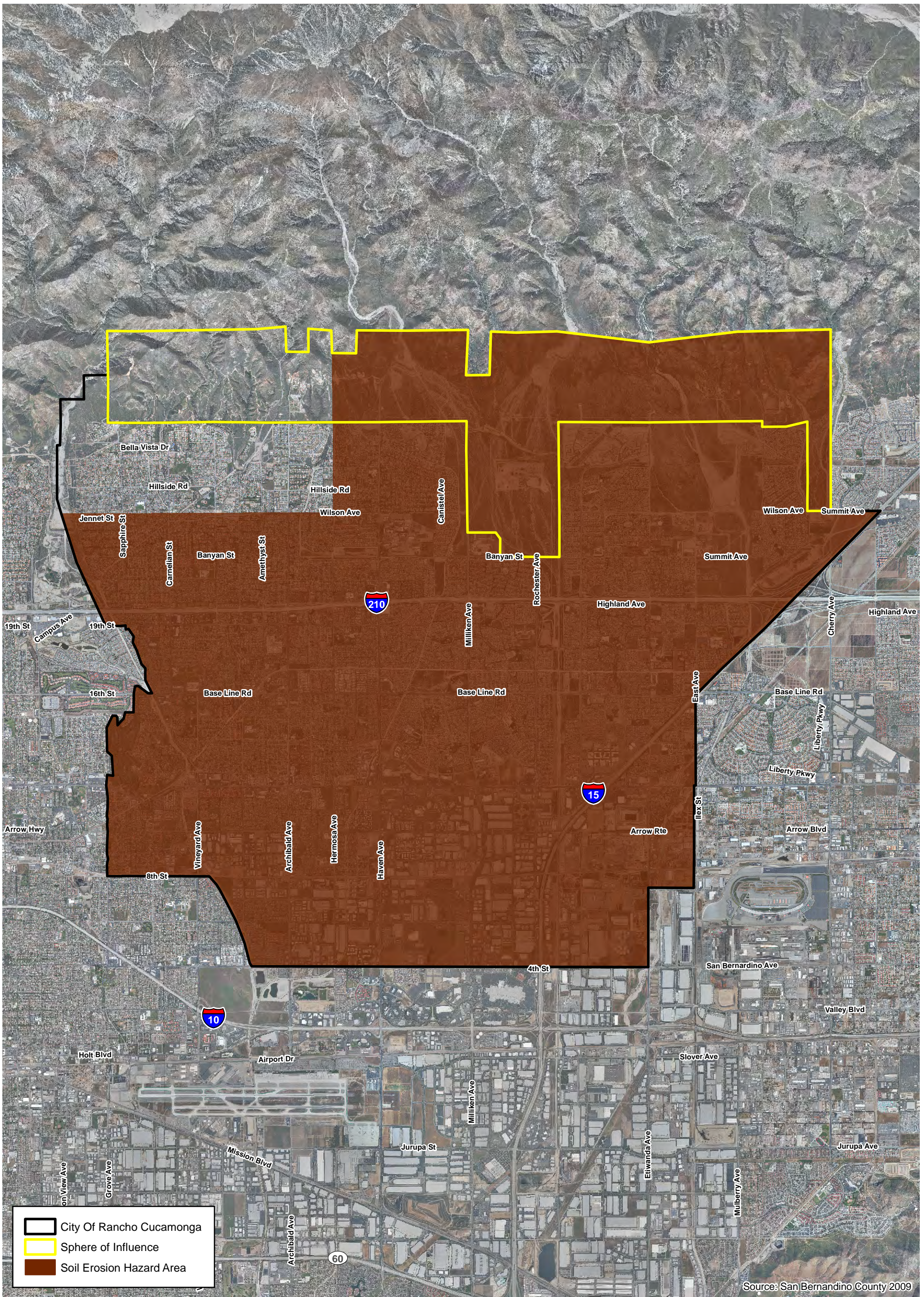
4.7.6 ENVIRONMENTAL IMPACTS

Seismic Hazards

Threshold 4.7a: **Would the proposed General Plan Update expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, (ii) strong seismic ground shaking, (iii) seismic related ground failure, including liquefaction, or (iv) landslides?**

Ground Rupture

Ground rupture refers to ground surface displacement that can result in structural, roadway, and pipeline damage. The Cucamonga Fault, running east-west along the northern City limits, has the potential for an M 7.0 earthquake that can lead to ground rupture along its fault traces.

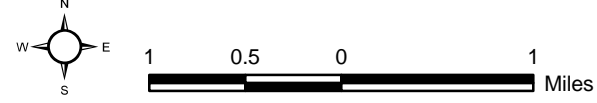


Source: San Bernardino County 2009

Soil Erosion Hazard Area

Exhibit 4.7-4

Rancho Cucamonga General Plan Update



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Ground displacements are estimated to be up to nine feet along the fault. In addition, the Red Hill Fault runs from the northeast around Etiwanda Avenue to the southwest around Red Hill. The Etiwanda Avenue Fault Scarp has potential for an M 6.5 earthquake and could cause ground rupture hazards to existing and planned developments along its trace. An earthquake on these faults has the potential for ground rupture hazards to future development and redevelopment (ECI 2000).

The Earthquake Fault Zone for the Etiwanda Avenue Fault Scarp is designated as Very Low Density Residential (up to two units per acre), Low Density Residential (two to four units per acre), and Neighborhood Commercial in the proposed Land Use Plan. This area consists of large lot residential uses and vacant land. Future development and redevelopment pursuant to the proposed 2010 General Plan Update that would be located on a fault trace of the Etiwanda Avenue Fault Scarp would be exposed to ground rupture hazards, including cracks on the ground surface, building foundation and structural damage, roadway cracks, and pipeline breaks.

As shown on Exhibit 4.7-2, the Earthquake Fault Zone for the Cucamonga Fault is largely in the SOI and is designated as Open Space, Flood Control/Utility Corridor, Hillside Residential, and Very Low Density Residential in the proposed Land Use Plan. This area consists of drainage channels, canyons, vacant land, water tanks and scattered residences. Again, future residential uses in areas within the Hillside Residential and Very Low Density Residential designations would expose persons and property to ground rupture hazards.

SC 4.7-1 requires disclosure of the presence of nearby faults during real estate transactions. SCs 4.7-2 and 4.7-3 require geotechnical investigations to determine the location of the fault trace and locate structures away from the fault trace. With the low density development allowed in these areas, opportunities to provide adequate setback from the fault trace would avoid ground rupture hazards to future developments. SC 4.7-4 requires the structural design of structures that would be located near the faults to include appropriate seismic design criteria. Compliance with these standard conditions will prevent the construction of buildings for human occupancy across the fault trace and would require setbacks from the trace, reducing ground rupture hazards to future development.

While not designated as an Earthquake Hazard Zone by the State, the inferred alignment of the Red Hill Fault across the City may pose ground-rupture hazards to future development and redevelopment. Similarly, unknown splays of the Cucamonga Fault present surface rupture hazards to future development in the northwestern corner of the City. Future development and redevelopment in these areas may be subject to hazards associated with surface rupture in the event of a major earthquake event on the Red Hill or Cucamonga Fault (ECI 2000).

Goal PS-5 of the Public Health and Safety Chapter seeks to minimize the potential damage to structures and loss of life that may result from earthquakes and other seismic hazards. Under this goal, Policy PS-5.1 considers the recently discovered splays of the Cucamonga Fault in the northwestern portion of the City as part of the Alquist-Priolo Earthquake Fault Zone for the Cucamonga Fault and an area with potential seismic hazards. The area along the southwestern segment of the Red Hill Fault is also considered an Alquist-Priolo Earthquake Fault Zone and an area with potential seismic hazards. These designations require future development and redevelopment planned in these zones to be subject to geotechnical investigations for structures designed for human occupancy to determine the exact location of the fault trace, to provide structural setbacks from the trace, and to recommend design approaches for structures and infrastructure to respond to probable earthquake magnitudes.

Policy PS-5.2 calls for minimum setbacks for active faults in the City to be at least 50 feet on either side, as based on the recommendations of the project geologist and City Engineer.

The buried/uncertain segment of the Red Hill Fault is also considered an area with potential seismic hazards where (1) a Potential Earthquake Fault Zone will be created and (2) special geologic investigations will be required for all essential and critical facilities to demonstrate that the site is not threatened by surface displacements from future earthquakes. Critical facilities include fire stations, schools, hospitals, dams and flood-control structures, bridges, communication centers, and other facilities that are needed during an emergency or that would pose unacceptable safety risks to the community if severely damaged.

Compliance with the following would reduce ground rupture hazards to future development and redevelopment: policies in the Public Health and Safety Chapter, the Natural Hazards Disclosure Act (SC 4.7-1), the A-P Act (SC 4.7-2), and the City's requirements for geotechnical investigations in the City-designated Earthquake Fault Zones (SC 4.7-3).

Impacts related to ground surface rupture would be less than significant; no mitigation is required.

Ground Shaking

Intense ground shaking in the City could occur during an earthquake event on the Cucamonga or Red Hill Fault. Also, the City of Rancho Cucamonga is located near two of California's most active faults: the San Andreas and San Jacinto Faults. Peak ground accelerations and ground shaking intensities are provided in Table 4.7-3. The San Andreas Fault has the probability of generating an M 7.3 earthquake, and the San Jacinto Fault has the probability of generating an M 6.7 earthquake (ECI 2000). Ground-shaking hazards associated with earthquake faults in the City, major faults in the region, and other nearby faults could pose hazards to future development and redevelopment under the proposed 2010 General Plan Update.

Damage to buildings is likely to occur with ground shaking, and would include structural damage to foundations; frames; walls and columns; and non-structural damage to windows, chimneys, and ceilings. Larger earthquakes and those of longer duration cause more damage, with some buildings performing more poorly than others (ECI 2000). Compliance with the CBC and the City's Building Regulations (SC 4.7-4) would allow new development and redevelopment to withstand ground shaking and avoid or reduce structural and non-structural damage.

Older buildings are generally more susceptible to ground shaking due to deterioration of building materials and because they were constructed under less stringent building codes. Redevelopment would allow for older buildings to be replaced with new ones that would be built to current building codes, including more stringent seismic design standards. Thus, beneficial impacts are expected with redevelopment under the proposed 2010 General Plan Update as vulnerable structures are demolished and new structures are more resistant to ground-shaking hazards.

In addition, Policy PS-5.3 of the Public Health and Safety Chapter calls for the strengthening of existing and planned facilities of the Cucamonga Valley Water District to increase public safety and to minimize potential damage from seismic hazards. Policy PS-5.4 calls for the retrofit of unreinforced masonry structures (URMs). Policy PS-5.6 promotes alternative project designs that incorporate low-intensity land uses in areas with seismic constraints. Policy PS-5.7 promotes public awareness of seismic hazards. Implementation of these policies would reduce hazards from ground shaking on existing and future developments in the City.

Impacts associated with ground shaking would be less than significant; no mitigation is required.

Liquefaction

During an earthquake, liquefaction may occur in areas with loose soils and high water tables. While no liquefaction hazards are known in the City, three small areas in the southwestern portion of the City north of Red Hill have perched water conditions and could be subject to liquefaction. Future development and redevelopment under the proposed Land Use Plan in these three areas would be exposed to liquefaction hazards. These hazards include soil settlement, loss of bearing capacity in foundation soils, and the buoyant rise of structures, leading to structural distress or failure. Excess hydrostatic pressure may also lead to sand boils, mud spouts, and seepage of water through ground cracks.

As required under SC 4.7-4, geotechnical investigations for new development and redevelopment would determine on-site geologic conditions and identify appropriate recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic design considerations. Compliance with SC 4.7-4 would identify potential for liquefaction hazards on individual development sites and the construction of buildings and infrastructure that ensures structural integrity to withstand liquefaction hazards

Impacts associated with liquefaction would be less than significant; no mitigation is required.

Landslides

Earthquake shaking frequently triggers rapid slides on unstable, sloping land. Rock falls and landslides from the San Gabriel Mountains would affect existing and planned developments at the northern end of the City and in the SOI. New development is expected to be limited in these areas per the Hillside Residential and Very Low Density Residential designations of the proposed Land Use Plan (refer to Policy PS-5.6 of the Public Health and Safety Chapter). These low density developments would limit the number of persons who would occupy and structures that would be built in these areas. It would also minimize disturbance of the slopes and decrease the potential for landslides. Compliance with the recommendations of project-specific geotechnical investigations (SC 4.7-4) and the City's Hillside Development Regulations (SC 4.7-5) would also preserve natural slopes and reduce landslide hazards.

Additionally, public awareness efforts under Policy PS-5.7 of the Public Health and Safety Chapter would promote emergency preparedness so that, in the event an earthquake, future residents of the area can take proper precautions to reduce personal injury and property damage.

Impacts associated with landslides would be less than significant; no mitigation is required.

Seismic Settlement

Seismic settlement may also occur, with differential settlement causing building damage over time. Future development and redevelopment on different soil foundations and at the base of hillsides may be subject to seismic settlement. This hazard can be reduced with proper site preparation involving densifying subsurface soils and designing foundations to accommodate a limited degree of differential settlement from seismic shaking.

Again, project-specific geotechnical investigations would identify the potential for soil settlement, including differential settlement, on individual sites and would provide appropriate recommendations for building and infrastructure design and construction to withstand soil

settlement. These include hillside cut and fill transition lots to be over-excavated, with fill depths beneath structures varying by no more than 100 percent. Compliance with the CBC and the City's Building Regulations and with the recommendations of project-specific geotechnical investigations (SCs 4.7-2, 4.7-3, and 4.7-4) would reduce hazards to less than significant levels.

Impacts associated with seismic settlement would be less than significant; no mitigation is required.

Impact 4.7a: Future development and redevelopment under the proposed 2010 General Plan Update would be exposed to seismic hazards, including surface rupture, ground shaking, liquefaction, landslides, and seismic settlement. Compliance with Goal PS-5 and its supporting policies in the Public Health and Safety Chapter of the proposed 2010 General Plan Update and with SCs 4.7-1 through 4.7-5 would reduce impacts to less than significant levels; no mitigation is required.

Soil Erosion

Threshold 4.7b: Would the proposed General Plan Update result in substantial soil erosion or the loss of topsoil?

The County of San Bernardino includes the City of Rancho Cucamonga in designated Soil Erosion Control Areas (shown in Exhibit 4.7-4). The City is also underlain by soils that have moderate to high erosion hazard and soil blowing hazards. Therefore, future development and redevelopment under the proposed 2010 General Plan Update could lead to soil erosion.

Ground Disturbance

Construction of future development and redevelopment would result in ground disturbance and changes in the local topography. Development sites featuring slopes may be altered to include manufactured slopes, berms, or retaining walls to account for slope changes and to create building pads. This would occur on larger sites and at the northern section of the City where the local topography features moderately sloping to steep slopes.

The City's Hillside Development Regulations (SC 4.7-5) and Grading Ordinance (SC 4.7-6) promote the retention of the natural topography and minimal grading to prevent erosion impacts, among other hazards. Compliance with these regulations would minimize ground disturbance and the potential for erosion of slopes by limiting the areas available for development. Conformance with SCs 4.7-5 and 4.7-6 would reduce impacts to less than significant levels; no mitigation is required.

Soil Erosion

The Delhi, Tujunga, Hanford, Cieneba, Ramona and Greenfield soils underlying the City have moderate to high erosion potential (USDA 1980). The location of these soils are shown in Exhibit 4.7-3. Grading and excavation activities for construction may lead to localized erosion, as wind and water carry loose soils off site. In general, erosion would likely occur in a southerly and southwesterly direction to match the general topography. Implementation of erosion-control measures as required by SC 4.7-7 and 4.7-8 would allow for the containment of soils on site and would prevent impacts on adjacent properties.

If ground disturbance activities occur during strong Santa Ana wind episodes, it is likely that wind erosion and fugitive dust would be generated. These would lead to the soiling of exterior

furniture and vehicles, nuisance to persons in outdoor areas, loose soils on roadways and driveways, reduction in visibility for drivers, and loss of topsoil.

Goal PS-8 of the Public Health and Safety Chapter seeks to minimize the risks associated with wind hazards. Policies PS-8.3 and PS-8.4 require agricultural operations and new construction to implement soil erosion and dust-control measures. Dust-control measures required by the County and City in Soil Erosion Control areas (SC 4.7-7) include pre-watering, prompt revegetation, and use of soil binders, which would reduce impacts associated with soil blowing and wind erosion. Compliance with the City's and County's erosion-control regulations would reduce soil erosion from future development and redevelopment.

In addition, future development and redevelopment projects are required to implement erosion-control Best Management Practices (BMPs) outlined in the Storm Water Pollution Prevention Plan (SWPPP) that would be developed and implemented as part of construction activities on sites greater than one acre, in compliance with the National Pollutant Discharge Elimination System (NPDES), as discussed further in Section 4.9, Hydrology and Water Quality. Compliance with SC 4.7-7 would prevent eroded soils from entering adjacent properties and would minimize sediments and loose soils from entering the City's roadways, storm drain systems, and adjacent areas.

Upon completion of development and redevelopment projects under the proposed 2010 General Plan Update, the loss of bare soils through the introduction of development including pavement, roads, buildings, and landscaping are expected to reduce soil erosion from both wind and water.

Assuming compliance with SCs 4.7-7 and 4.7-8, future development and redevelopment would not result in significant adverse impacts associated with substantial soil erosion or loss of topsoil. Impacts relating to erosion would be temporary and less than significant; no mitigation is required.

Impact 4.7b: Soil erosion hazards are present in the City and ground disturbance associated with the construction of new development and redevelopment projects under the proposed 2010 General Plan Update may lead to wind and water erosion. Compliance with Goal PS-5 and Goal PS-8 and their supporting policies in the Public Health and Safety Chapter of the proposed 2010 General Plan Update and SCs 4.7-5 through 4.7-8 would reduce erosion hazards. Impacts would be temporary and less than significant; no mitigation is required.

Geologic Stability

Threshold 4.7c: Would future development or redevelopment under the proposed General Plan Update be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Landslides

The hillside areas at the northern end of the City and in the SOI have the potential for slope failure, landslides, and/or erosion. Areas subject to slope instability contain slopes of 30 percent or greater. The City's Hillside Development Regulations prohibit development in areas with slopes over 30 percent (refer to SC 4.7-5). In compliance with SC 4.7-5, future development would not occur in these areas and would not be exposed to slope failure.

Landslides may be induced by seismic activity, heavy rains, or construction activity and may present a risk to human life and property located in or directly below the areas subject to the landslide. While no landslides have been recorded within the City limits, some have historically occurred within the SOI. Potential redevelopment areas on the steep slopes in the Red Hill area may be subject to slope instability, which may result in landslides. The bluffs along the upper Cucamonga Creek have a high potential for failure because of undercutting by flood flow from the stream. Future development in the northwestern section of the City along Cucamonga Creek may also be exposed to landslide hazards. Also, future development in the hillside areas in the SOI would be exposed to landslide hazards posed by slope failure in the San Gabriel Mountains.

Rock falls may also occur in the hillsides at the northern edge of the City and the SOI, while debris flows may occur along the canyons and creeks at the northern end of the City and in the SOI.

A limited amount of new development is expected in the hillside areas in the SOI, as allowed under the Hillside Residential and Very Low Density Residential designations of the proposed Land Use Plan (refer to Exhibit 3-3 in Section 3.0, Project Description). Development in these areas would be limited based on the low development densities allowed by the Hillside Residential and Very Low Density Residential designations; therefore, the number of persons and structures exposed to landslide hazards would also be limited. Additionally, development pursuant to the Hillside Residential and Very Low Density Residential designations would minimize slope disturbance and decrease the potential for landslides, rock falls, and debris flows.

Goal PS-6 of the Public Health and Safety Chapter seeks to minimize the potential damage to structures and loss of life that may result from geologic hazards. Supporting policies call for enforcement of the City's Hillside Development Guidelines (SC 4.7-5); mitigation for unstable hillside areas; a geologic disaster recovery ordinance; and third-party review of geotechnical reports. Implementation of policies PS-5.6 and PS-5.7 of the Public Health and Safety Chapter would minimize hazard exposure and promote emergency preparedness. Also, preparation of project-specific geotechnical investigations (SC 4.7-9), the City's Grading Ordinance (SC 4.7-6), and the City's Hillside Development Guidelines (SC 4.7-5) would preserve natural slopes and reduce landslide hazards. Specifically, the hillside development guidelines would minimize grading of natural slopes and require aesthetic treatments to improve the appearance of the hillsides and preserve the stability of the slopes. These measures include returning slopes to their natural appearance and steepness after grading. Preservation of natural slopes would reduce debris flow potential. SCs 4.7-10 and 4.7-11 also require final grading plans and grading plan checks to ensure adequate stability of on-site soils.

There are several debris basins located upstream of the City of Rancho Cucamonga that reduce storm water flows in canyons and storm drain channels. These basins reduce storm water volume and velocity, as well as debris flows. They include the Cucamonga Creek Debris Basin, the Day Creek Debris Basin, the Deer Creek Debris Basin, Alta Loma Basins 1 and 2, San Sevaine Basin No. 5, and the Etiwanda Debris Basin. These basins are owned and maintained by the San Bernardino County Flood Control District. The County's continued maintenance of debris basins would reduce hazards associated with debris flows from the mountains (Eke 2009). Therefore, compliance with SCs 4.7-5, 4.7-6, 4.7-9, 4.7-10, and 4.7-11 would ensure that there would be less than significant impacts related to landslides; no mitigation is required.

Soil Erosion

Hazards associated with soil erosion and blowing sand are discussed above, under Threshold 4.7b, and impacts are considered less than significant with implementation of applicable SCs. Compliance with the City's and County's soil erosion control regulations (SCs 4.7-7 and 4.7-8) would be required for future development and redevelopment under the proposed 2010 General Plan Update.

Collapsible Soils

Hazards from collapsible soils are present in areas overlain by Holocene alluvial deposits, along washes, and in areas overlain by windblown sands in the City's south-central section. Future development and redevelopment in these areas would be exposed to sudden and substantial soil settlement, potentially resulting in cracks in foundations and walls, along with tilting or sagging floors, cracking or separation in the structure, and non-functioning doors and windows.

Project-specific geotechnical investigations are expected to identify the presence of collapsible soils on individual development sites. Compliance with the City's Building Regulations for the preparation of geotechnical investigations (SC 4.7-4 and SC 4.7-9) would require the design and construction of structures and infrastructure to withstand anticipated levels of soil settlement, thereby reducing potential hazards related to collapsible soils to less than significant levels.

Similarly, differential displacement and fissures due to subsidence at the margins of the Chino Valley adjacent to the San Gabriel Mountains and Red Hill would be identified as part of individual geotechnical investigations, with appropriate recommendations to address these hazards. Compliance with the City's Building Regulations (SC 4.7-4) would reduce hazards to less than significant levels; no mitigation is required.

Impact 4.7c: Future development and redevelopment would be exposed to geologic hazards in the City and the SOI, which include landslides, soil erosion, and collapsible soils. Compliance with Goal PS-6 and its supporting the policies and policies PS-5.6 and PS-5.7 in the Public Health and Safety Chapter of the proposed 2010 General Plan Update and with SCs 4.7-1, 4.7-4, 4.7-5, 4.7-6, 4.7-9, 4.7-10, and 4.7-11 would reduce hazards to less than significant levels; no mitigation is required.

Expansive Soils

Threshold 4.7d: Would future development or redevelopment under the revised General Plan Update be located on expansive soil, as defined in Section 1802.3.2 of the 2007 California Building Code, creating substantial risks to life or property?

According to USDA's Soil Survey of San Bernardino County, Southwestern Part, the soils in the City have low shrink-swell potential (USDA 1980). However, site-specific geologic conditions must be evaluated based on soil borings, and geotechnical investigations shall be required for every development (SC 4.7-4 and 4.7-9). The geotechnical investigations would identify structural design criteria and construction recommendations to ensure the stability and integrity of structures and infrastructure that would be built, including potential for soil expansion and the soil expansion index that needs to be used in the engineering design. Compliance with the City's Building Regulations for the preparation of geotechnical investigation and compliance with appropriate construction standards for individual projects (SC 4.7-4 and 4.7-9) as well as

preparation of a soils report (SC 4.7-12) would ensure that impacts related to expansive soils would be less than significant; no mitigation is required.

Impact 4.7d: No soil expansion hazards are expected in the City and geotechnical and soils investigations for individual projects, as required pursuant to SCs 4.7-1, 4.7-9, and 4.7-12, will identify the soil expansion index of on-site soils that need to be considered in the design of structures and infrastructure. Impacts related to soil expansion would be less than significant; no mitigation is required.

Septic Tanks

Threshold 4.7e: Does the City have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Where existing sewer lines are available, future development and redevelopment in the City would connect to the public sewer system (SC 4.7-13). However, the foothills in the SOI are largely undeveloped, and no sewer lines are present to serve this area. Future developments in the SOI in areas designated as Hillside Residential are likely to utilize on-site septic tank systems. Upon future annexation into the City, these areas would be required to connect to the public sewer system.

In areas overlain by Cieneba and Ramona soils, severe limitations to septic tank systems could pose hazards to surface and groundwater, and could cause runoff, erosion, and unstable soils. Cieneba soils are found in the foothills within the City's SOI and Ramona soils are found in scattered locations at the western section of the City (USDA 1980). Since the western section is served by the public sewer system, no septic tank limitations are proposed to be located on Ramona soils. Where underlying soils are Cieneba soils, septic tank limitations may occur.

According to the Santa Ana RWQCB's requirements (SC 4.7-14), maximum development densities are established for areas that are served by septic systems, thereby limiting the number of units on septic systems in the SOI. Adherence to these limitations, coupled with the limits on maximum development densities under the proposed Land Use Plan for this area, the SOI would not support a large number of septic tanks in this area. In addition, compliance with the County's septic tank regulations for design, use and maintenance of on-site septic systems (SC 4.7-15) would prevent the potential for surface or groundwater contamination where septic tanks are built. The County guidelines require soil percolation tests to determine suitability of septic tanks at planned locations. Thus, while septic tanks may be located in areas with soil limitations, the number of septic systems would be limited by RWQCB regulations; the density requirements of the proposed Land Use Plan; and the County's design, use and maintenance requirements. Assuming implementation of SCs 4.7-8 and 4.7-9, impacts would be less than significant; no mitigation is required.

Impact 4.7e: Septic tanks in areas with soil limitations are expected on sites overlain by Cieneba and Ramona soils, as found at the foothills in the SOI. Compliance with SCs 4.7-13, 4.7-14, and 4.7-15 would limit the number of septic systems and require them to be designed, used, and maintained properly. Impacts would be less than significant; no mitigation is required.

4.7.7 CUMULATIVE IMPACTS

Future development and redevelopment pursuant to the proposed 2010 General Plan Update and other development projects in the surrounding area would involve grading and excavation activities on individual sites, which would result in changes to the area's existing topography. Development sites that are relatively flat would remain flat, while hillside development would require cut and fill, manufactured slopes, and changes to the natural topography. Compliance with the CBC and the recommendations of individual geotechnical investigations would reduce geologic hazards to new development (SC 4.7-4).

Earthquake faults in the project area include the Cucamonga, San Andreas, San Jacinto, San Jose, Sierra Madre, Whittier-Chino-Elsinore, Elysian Park Thrust, Cleghorn, and North Frontal Faults, which would pose surface rupture hazards to developments proposed over the fault traces. However, compliance with the A-P Act and the City's A-P modifications would minimize surface rupture hazards to new development and redevelopment in and near the City (SCs 4.7-1 through 4.7-3).

Ground shaking hazards due to regional earthquake events could lead to the damage of buildings, parking lots, and utility lines, and the resulting fires, falling objects, and other structural hazards, which could cause property damage and personal injuries. These ground-shaking hazards are not unlike the potential hazards in other areas of the region. Depending on the magnitude of the earthquake, distance to the development site, underlying soil conditions, and strength of structures and infrastructure, ground-shaking hazards may be significant.

Future development and redevelopment in the City and the surrounding area would be designed and built in accordance with applicable standards in the CBC, including pertinent seismic design criteria. Existing buildings to be reused would be rehabilitated in accordance with the CBC and local building regulations (SC 4.7-4). This will allow structures to withstand ground shaking and to maintain hazards at acceptable levels.

Site-specific geologic hazards would be addressed by the geotechnical investigation required by individual cities and the County for each development proposal. This investigation would identify the geologic and seismic characteristics on a site and provide guidelines for engineering design and construction to ensure the structural integrity of proposed development. Compliance of individual projects with the recommendations of the geotechnical investigation would prevent hazards associated with unstable soils, landslide potential, lateral spreading, liquefaction, soil collapse, expansive soil, soil erosion, and other geologic issues. No cumulative adverse impacts are expected.

Future development and redevelopment would connect to a public sewer system where available, but those areas in the SOI which are under County of San Bernardino jurisdiction may utilize septic tanks or alternative wastewater disposal systems in areas without sewer service. Compliance with the RWQCB regulations and the County of San Bernardino's Septic Tank Regulations (SCs 4.7-13 through 4.7-15) would prevent hazards associated with soils incapable of supporting septic systems.

Impacts on geology by new development are not expected to be cumulatively significant, with compliance with geotechnical and engineering practices related to seismic and geologic hazard reduction, structural integrity, and soil management.

4.7.8 MITIGATION MEASURES

With implementation of the relevant goals and policies in the proposed 2010 General Plan Update and compliance with the standard conditions, no significant adverse impacts on geology and soils are expected. Thus, no mitigation measures are required.

4.7.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Seismic Hazards

Less Than Significant.

Soil Erosion

Less Than Significant.

Geologic Stability

Less Than Significant.

Expansive Soils

Less Than Significant.

Septic Tanks

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.8 HAZARDS AND HAZARDOUS MATERIALS

A hazardous material, as defined in the Section 25501 of the *California Health and Safety Code*, is “any material that, due to quantity, concentration, or physical or chemical characteristics, poses a significant potential hazard to public health and safety or to the environment, if released into the workplace or the environment”.

The discussion of hazardous materials in this section is derived from *Special Studies – Hazardous Materials Analysis* by Laguna Geosciences Inc. (March 2009), which was prepared for the 2010 General Plan Update and is included in Appendix F. This report includes a database record search that identifies hazardous material users and generators in the City, as listed in various Federal, State, and local databases.

4.8.1 RELEVANT POLICIES AND REGULATIONS

Hazards

Federal

FAA Part 77 Guidelines

Part 77 of the Federal Aviation Regulations (Title 14 of the *Code of Federal Regulations* [CFR]) addresses objects affecting navigable airspace. This regulation requires that the Federal Aviation Administration (FAA) be notified of any project that may encroach upon established navigable airspace. Once notified, the FAA is responsible for the review of site and building plans to determine the effects of proposed construction on air navigation. Measures are then identified to ensure the continued safety of air navigation.

The FAA must be notified for any construction or alteration of a temporary or permanent structure, equipment, highway, railroad, roadway, or natural growth that exceeds established height limitations. As defined by the FAA, any feature must be considered as a potential airspace hazard and be subject to analysis if it meets one or more of the following criteria:

1. A feature is more than 200 feet in height;
2. A feature extends into an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway that is 3,200 feet or longer; or
3. A feature that extends into an imaginary surface extending outward and upward at a slope of 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway that is less than 3,200 feet long.

The southern section of the City of Rancho Cucamonga is within the area subject to FAA notification and development review due to the City’s proximity to LA/Ontario International Airport.

State

Fire Hazard Severity Zones

The California Department of Forestry and Fire Protection (CDF) created Fire Hazard Severity Zones using a computer model that factors in the fire history, existing and potential fuel (natural

vegetation), flame length, blowing embers, terrain, and typical weather for an area. The severity of the hazard is based on the likelihood that an area will burn over a 30- to 50-year period without fuel-reduction efforts. Given the results of the modeling, the State identifies an area as a “moderate”, “high”, or “very high” fire hazard severity zone.

Wildland-Urban Interface Fire Area Building Standards

Title 24, Part 2 of *California Code of Regulations* (CCR), also known as the 2007 California Building Code (CBC), addresses building standards for new structures constructed in or near a designated fire hazard severity zone. New buildings located in any fire hazard severity zone must comply with all sections of the current CBC. Specifically, minimum standards are established for materials and to provide a reasonable level of protection from wildfire exposure for buildings in Wildland-Urban Interface Fire Areas. Ignition-resistant materials and design are required to reduce the risk from flame or burning embers projected by a vegetation fire.

California Fire Plan

The State Board of Forestry (Board) and the CDF regulate wildland fire protection in California through the California Fire Plan. The overall goal of the Plan is to reduce the total costs and losses resulting from wildfire (CFSC 2010). The California Fire Plan has five strategic objectives:

- To create wildfire protection zones that reduce the risks to citizens and firefighters.
- To assess all wildlands, not just the State responsibility areas. Analyses must include all wildland fire service providers—Federal, State, local government, and private. The analysis must identify high risk and high value areas; it must develop information on and determine who is responsible, who is responding, and who is paying for wildland fire emergencies.
- To identify and analyze key policy issues and develop recommendations for changes in public policy. Analysis will include alternatives to reduce the total costs and losses by increasing fire protection system effectiveness.
- To have a strong fiscal policy focus and monitor the wildland fire protection system in fiscal terms. This will include all public and private expenditures and economic losses.
- To translate the analyses into public policies. (CFSC 2010)

The California Fire Plan is organized into five main components to achieve these objectives.

1. **Wildfire Protection Zones.** The California Fire Plan establishes wildfire safety zones that are intended to reduce citizen and firefighter risks associated with wildfires.
2. **Initial Attack Success.** The California Fire Plan contains a metric for measuring the CDF’s ability to protect lands and resources against damage from wildfires.
3. **Assets Protected.** According to the California Fire Plan, assets include citizens and firefighter safety, watersheds and water, timber, wildlife and habitat, unique areas (scenic, cultural, and historic), recreation, rangelands, structures, and air quality. The fire plan identifies the degree of risk each asset would incur as well as the necessary level of protection required for each identified asset.

4. **Prefire Management.** The California Fire Plan identifies potential management methods to reduce the risk of wildland fire damage. Some of these management techniques include incendiary fuel reduction, ignition management, improved level of service, and forest health maintenance.
5. **Fiscal Framework.** The California Fire Plan provides a methodology for monitoring annual and long-term changes in California's wildland fire protection systems in order to identify future funding needs.

Local

Rancho Cucamonga Fire Protection District Strategic Plan

In 2005, the Rancho Cucamonga Fire Protection District completed an analysis and comprehensive review of service demands and resource allocation. This effort led to a Strategic Plan that provides recommendations for appropriate levels of fire protection and emergency services in the City. The Strategic Plan states that the most significant fire threat to Rancho Cucamonga continues to be the many miles of Wildland Urban Interface¹ (WUI) in the northern end of the City. The District addresses the WUI fire threat through a combination of prevention and suppression strategies. District Firefighters develop specialized capabilities training and equipment to prepare for and mitigate fires in the WUI. Members participate on U.S. Forest Service incident management teams and annually participate in San Bernardino County's Preparedness Exercise to hone their skills on wildland firefighting techniques, as well as test preparation plans and inter-department communications. The Strategic Plan also calls for (1) the development of a Wildfire Community Protection Plan; (2) a definition of the Very High Fire Hazard Severity Zone; (3) continued efforts to assess and identify high risk areas in the community; (4) development of seasonal programs to communicate the mitigation program goals and objectives to the public; (5) development of fuel modification/brush abatement programs; and (6) a gates and lock access program.

Rancho Cucamonga Fire Code and Fire Protection Plan Requirements

The Board of Directors of the Rancho Cucamonga Fire Protection District requires a Fire Protection Plan for all development within hazardous fire areas, including the WUI. The plan must include mitigation measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. It must also address water supply, access, ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbecues and grills, and defensible space fuel modification areas are imposed on new developments.

Specific operational plans for responding to significant fires in the WUI may also be found in Rancho Cucamonga Fire District operational manuals.

¹ Wildland Urban Interface is defined as the area where urban development meets undeveloped wildlands.

Hazardous Materials

Federal

Hazardous Materials Transportation Act

The main purpose of the Hazardous Materials Transportation Act is to provide adequate protection against risks to life and property inherent in the transport of hazardous materials, by improving the regulatory and enforcement authority of the Secretary of Transportation.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was authorized by Congress on October 21, 1976. This law creates the framework for the proper management of hazardous and nonhazardous solid waste. RCRA amended the Solid Waste Disposal Act of 1965 and has the following goals:

- To protect human health and the environment from the potential hazards of waste disposal;
- To conserve energy and natural resources;
- To reduce the amount of waste generated; and
- To ensure that wastes are managed in an environmentally sound manner.

To achieve these goals, the RCRA established the following programs:

- The Solid Waste Program encourages States to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste; sets criteria for municipal solid waste landfills and other solid waste disposal facilities; and prohibits the open dumping of solid waste.
- The Hazardous Waste Program establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal, in effect from “cradle to grave”; and
- The Underground Storage Tank Program regulates underground storage tanks containing hazardous substances and petroleum products.

In November 1984, RCRA was amended with the passing of the Federal Hazardous and Solid Waste Amendments (HSWA), which included:

- Phasing out land disposal of hazardous waste;
- Increased enforcement authority for United States Environmental Protection Agency (USEPA);
- More stringent hazardous waste management standards; and
- Comprehensive underground storage tank program.

RCRA has been amended on two other occasions since the HSWA:

- The Federal Facility Compliance Act of 1992 strengthened enforcement of RCRA at Federal facilities, and
- The Land Disposal Program Flexibility Act of 1996 provided regulatory flexibility for land disposal of certain wastes.

Toxic Substances Control Act

The Toxic Substance Control Act (TSCA) of 1976 (15 *United States Code* [USC] 2601) gives the USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and requires reporting or testing of those that may pose an environmental or human health hazard. The USEPA also has the ability to ban the manufacture and import of chemicals that pose an unreasonable risk. The USEPA tracks thousands of new chemicals that are developed each year with either unknown or dangerous characteristics. They then control these chemicals, as necessary, to protect human health and the environment.

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health and the environment. Taxes go into a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites.

CERCLA also established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and provided cleanup when no responsible party could be identified. It authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on the USEPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP), which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA made several important changes to the Superfund program:

- It stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites;

- It required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- It provided new enforcement authorities and settlement tools;
- It increased State involvement in every phase of the Superfund program;
- It increased the focus on human health problems posed by hazardous waste sites;
- It encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- It increased the size of the Superfund trust fund.

SARA also required the USEPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL.

Emergency Planning and Community Right-To-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted by Congress on October 17, 1986. This Act began as a grassroots right-to-know movement at the State and local levels. Labor unions and citizen activists initially worked together for a common goal: greater protection of the public from chemical emergencies and dangers through public disclosure by business and industry of the chemicals they store, use, and release.

This law requires businesses to report on emissions of certain toxic chemicals, and that information is placed into the Toxics Release Inventory, a publicly accessible data bank. The law also requires certain businesses to report releases of extremely hazardous chemicals to State and local authorities, and to disclose the quantities and types of toxic chemicals stored on site.

State

California Hazardous Waste Control Act

The California Hazardous Waste Control Act (HWCA), as found in the California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq., authorizes the California State Department of Toxic Substances Control and local Certified Unified Program Agencies (CUPA) to regulate facilities that generate or treat hazardous waste. The HWCA authorizes CUPAs to perform the following actions:

- Conduct inspections of any factory, plant, construction site, waste disposal site, transfer station, establishment or any other place or environment where hazardous wastes are stored, handled, processed, disposed of, or being treated to recover resources;
- Maintain records of compliance with the Hazardous Waste Control Act;
- Require hazardous waste generators as provided herein, to pay inspection and administration fees to cover the costs of administering the provisions in this Act. Fees may include but shall not be limited to the costs of inspection, document development and processing, recordkeeping, enforcement activities, and informational materials development and distribution;

- Issue authorization for on-site treatment of hazardous waste to persons eligible to operate pursuant to permit-by-rule, conditional authorization or conditional exemption; and
- Enforce against violations of the HWCA.

Carpenter-Presley-Tanner Hazardous Waste Substances Account Act

In 1981, the Carpenter-Presley-Tanner Hazardous Waste Substances Account Act created the Hazardous Substances Account and established a fee schedule on the land disposal of hazardous wastes to cover the costs of remedial activities and associated administrative costs, hazardous substance response equipment, health effects studies, and the expenses of the Hazardous Waste Cleanup Arbitration panel.

Certified Unified Program Agency (CUPA)

In 1993, Senate Bill 1082 created the CUPA to foster effective partnerships between local, State and Federal agencies. The program consolidated the administrative, permits, inspections, and enforcement activities of the following environmental and emergency management programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- California Accidental Release Prevention Program;
- Underground Storage Program;
- Aboveground Petroleum Storage Act Program;
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs; and
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

CUPA is implemented at the local level by government agencies certified by the Secretary of California Environmental Protection Agency. The CUPA for the City of Rancho Cucamonga is the San Bernardino County Fire Department.

California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) is a merging of the Federal Accidental Release Prevention Program and State programs for the prevention of accidental release of regulated toxic and flammable substances. It replaced the California Risk Management and Prevention Program and was created to eliminate the need for two separate and distinct risk management programs.

Stationary sources exceeding a threshold quantity of regulated substances are evaluated under this program to determine the potential for and impacts of accidental releases from the source. Depending on the potential hazards, the owner or occupant of a stationary source may be required to develop and submit a risk management plan.

Lead Abatement

Because of its toxic properties, lead is regulated as a hazardous material. Inorganic lead is also regulated as a toxic air contaminant. In California, lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. In addition, California Occupational Safety and Health Administration (CalOSHA) has regulations to protect worker safety during potential exposure to lead under Title 8 of the California Code of Regulations, Section 1532.1 (Lead). All demolition that could result in the release of lead must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.

Asbestos Abatement

Asbestos is a known human carcinogen and the United States Environmental Protection Agency (US EPA) and California EPA (CalEPA) have identified asbestos as a hazardous air pollutant pursuant to Section 12 of the Federal Clean Air Act. Further, the California Air Resources Board (CARB) has identified asbestos as a Toxic Air Contaminant (TAC) pursuant to the *California Health and Safety Code* (Section 39650 et seq.). Asbestos is also regulated as a potential worker safety hazard under the authority of the CalOSHA. These rules and regulations prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to Federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos.

In California, asbestos abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services (DHS). In addition, CalOSHA has regulations to protect worker safety during potential exposure to asbestos under Title 8 of the *California Code of Regulations*, Section 1529 (Asbestos). All demolition that could result in the release of asbestos must be conducted according to CalOSHA standards. These standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.

Regional

Asbestos Removal

The South Coast Air Quality Management District's (SCAQMD's) Rule 1403 provides guidelines for the proper removal and disposal of asbestos-containing materials. In accordance with Rule 1403, structures that may contain asbestos are required to be subject to an asbestos survey by a Certified Asbestos Consultant (certified by OSHA) to identify building materials that contain asbestos. Under this rule, removal of asbestos must include prior SCAQMD notification; compliance with removal procedures and time schedules; asbestos-handling and clean-up procedures; and storage, disposal, and landfilling requirements.

A number of different agencies implement the State and Federal mandates on hazardous materials and wastes. These include:

- United States Environmental Protection Agency (EPA)
- California Environmental Protection Agency (Cal/EPA)

- California Department of Toxic Substances Control (DTSC)
- State Water Resources Control Board (SWRCB)
- Santa Ana Region of the California Regional Water Quality Control Board (RWQCB)
- Office of Environmental Health Hazard Assessment (OEHHA)
- County of San Bernardino Environmental Health Services
- San Bernardino County Fire Department (SBCFD), Hazardous Materials Division
- Rancho Cucamonga Fire Protection District (Fire District), Hazardous Material (Hazmat) Team
- Rancho Cucamonga and San Bernardino County Fire Department Household Hazardous Waste Facility

4.8.2 EXISTING CONDITIONS

Airports

There are no airports located in the City of Rancho Cucamonga. The nearest airport to the City is the LA/Ontario International Airport, located approximately 1.2 miles south of the City's southern boundary. This airport is a commercial service airport, which is defined as a publicly owned airport that has at least 2,500 passenger boardings per year and receives scheduled passenger service. Cable Airport in the City of Upland is located approximately 3.5 miles west of the City's western boundary. This airport is a general aviation airport (fewer than 2,500 passenger boardings per year; fewer than 100 million pounds of cargo per year; and no scheduled passenger service) (FAA 2002).

The City of Ontario is currently preparing an Airport Land Use Compatibility Plan (ALUCP) for the LA/Ontario International Airport. A draft ALUCP is anticipated to be released in the spring of 2010 and formally adopted in the summer 2010 by the Ontario City Council. In an effort to involve collaborative and collective planning efforts among the City of Ontario, Los Angeles World Airports (LAWA), and affected jurisdictions, a Technical Advisory Committee (TAC) has been formed to review background information and preliminary regulations and policies to be compiled into the ALUCP. Rancho Cucamonga, an affected jurisdiction, has attended TAC meetings.

The ALUCP affects Rancho Cucamonga in three ways: airspace protection, overflight notification, and noise. Properties in Rancho Cucamonga south of 8th Street could be affected by aircraft noise, which is discussed further in Section 4.12, Noise. Airspace protection will affect land uses and building heights in the southern portion of Rancho Cucamonga within FAR Part 77 surfaces.

With regard to airspace protection, airport protection standards and criteria in the proposed ALUCP will be based upon the FAR Part 77, Subpart B and Subpart C. Part 77 Subpart B requires FAA review before approval of a project if proposed temporary or permanent structures or objects exceed height standards. Part 77 Subpart C establishes standards for determining obstructions to air navigation. As of January 2010, draft height standards of 35 feet for some

industrial areas have been proposed. However, Exhibit 4.8-1, Airspace Protection Areas, identifies areas within the City where FAA notification and review is required.

The City of Ontario has also proposed and initiated an alternative process, which would not require an Airport Land Use Commission to review development proposals within the airport influence area. Representation by the airport and other affected agencies would be accomplished through a TAC and, when necessary, through a Mediation Board. The TAC would provide input into preparation of the ALUCP, offer technical assistance to the affected jurisdictions regarding compatibility matters, provide oversight of the jurisdiction's implementation actions, and help to resolve compatibility issues from a technical perspective (Hogle-Ireland 2009a).

Cable Airport in Upland is located more than two miles from the City of Rancho Cucamonga, and the planning area boundaries of the Airport Land Use Plan for this airport do not extend into the City.

Wildland Fire Hazards

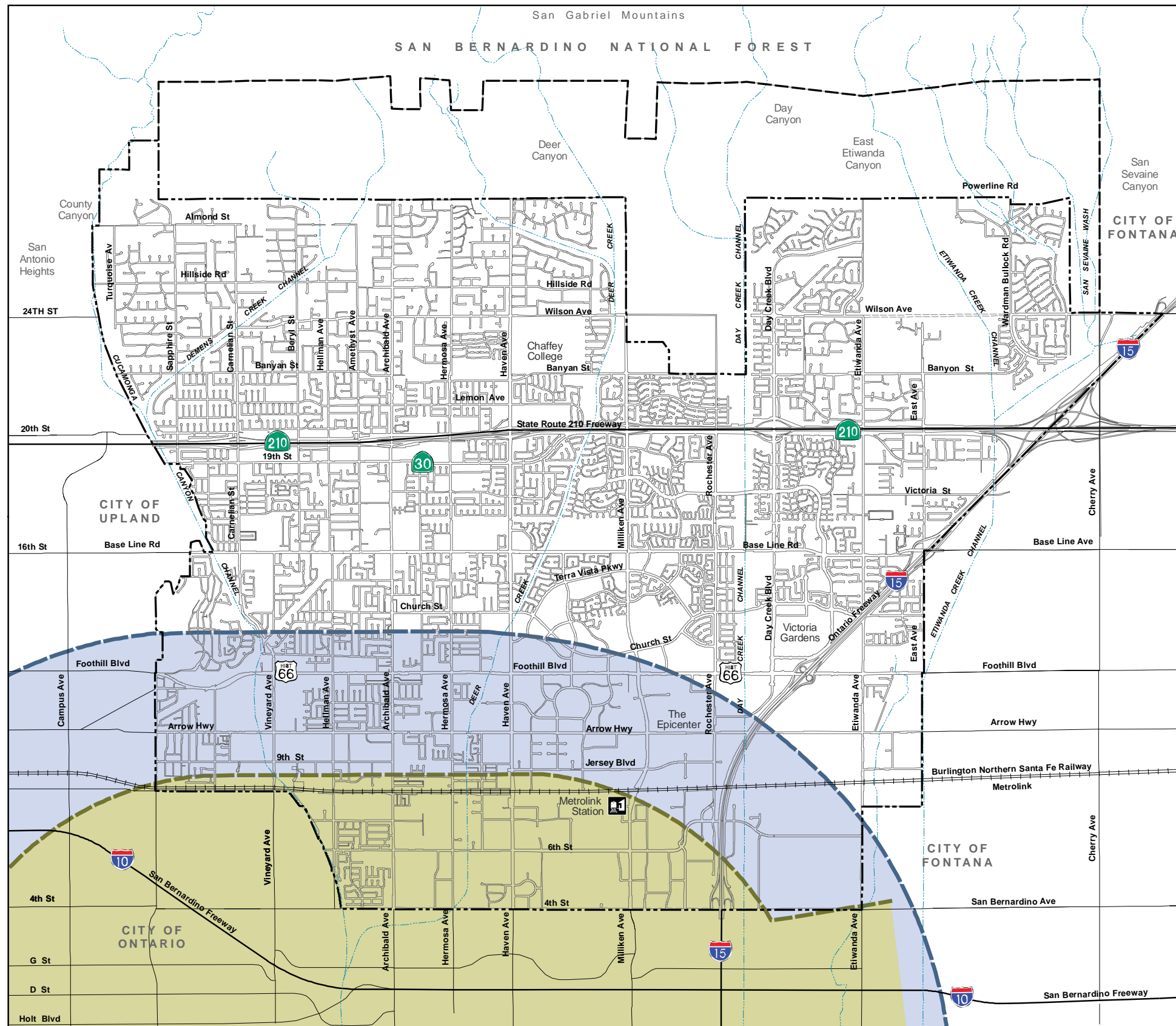
According to the Wildland Fire Background Report prepared for the 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore, planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

An increasing number of Southern Californians, including residents of Rancho Cucamonga, live near and in wildland areas. This results in an increased potential of wildfires in populated areas. The potential for extremely dangerous and complex fire conditions in areas of wildland-urban interfaces poses a serious threat to public and firefighter safety if a severe wildland fire were to rage into developed areas.

Weather, topography, and vegetation type all affect fire intensity. California has extended droughts, which increase the number of days with low humidity and consequently, the amount of dried vegetation (fuel). Santa Ana winds—the hot, dry winds that intermittently blow across Southern California—further increase the potential for ignition and spread of fires. Rancho Cucamonga's location makes it susceptible to these hazardous fire conditions. Its 11-square-mile SOI extends from the City's northern border up to the San Bernardino National Forest, where the hilly terrain and dried vegetation create dangerous fire conditions. Temperatures can reach 95 degrees Fahrenheit, and the Santa Ana winds can increase temperatures, bringing hotter temperatures and lower humidity (Hogle-Ireland 2008).

In Rancho Cucamonga, a majority of the San Bernardino National Forest is located within a "Very High" Fire Hazard Severity Zone, with a portion of the San Sevaine Wash identified as "High" and a narrow portion around the Day Creek Channel identified as "Moderate" (refer to Exhibit 4.8-2, Fire Hazard Severity Zones).

In October 2003, Rancho Cucamonga and neighboring cities in San Bernardino County experienced the Grand Prix and Old Fire wildland fires that destroyed 1,194 homes and burned a total of 161,175 acres throughout the City of Rancho Cucamonga and surrounding communities (USFS 2008).



Airspace Protection Areas

FAA Height Notification Area¹

FAA Obstruction Surfaces²

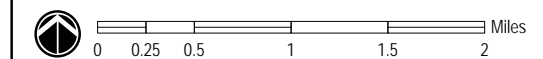
Rancho Cucamonga City Boundary

Sphere of Influence

Notes: 1. Based on FAR Part 77, Subpart B, which requires that the FAA be notified of any proposed construction or alteration having a height greater than an imaginary surface extending 100 feet outward and 1 foot upward (slope of 100 to 1) for a distance of 20,000 feet from nearest point of any runway. Beyond FAA Height Notification Area boundary, any object taller than 200 feet requires FAA notification.

2. FAR Part 77 Obstruction Surfaces: Based on FAR Part 77, Subpart C, which establishes standards for determining obstructions to air navigation.

3. Existing airport elevation is 944 feet above mean sea level (MSL). Future airport elevation assumed at 944 feet MSL. Actual to be determined.



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Airspace Protection Areas

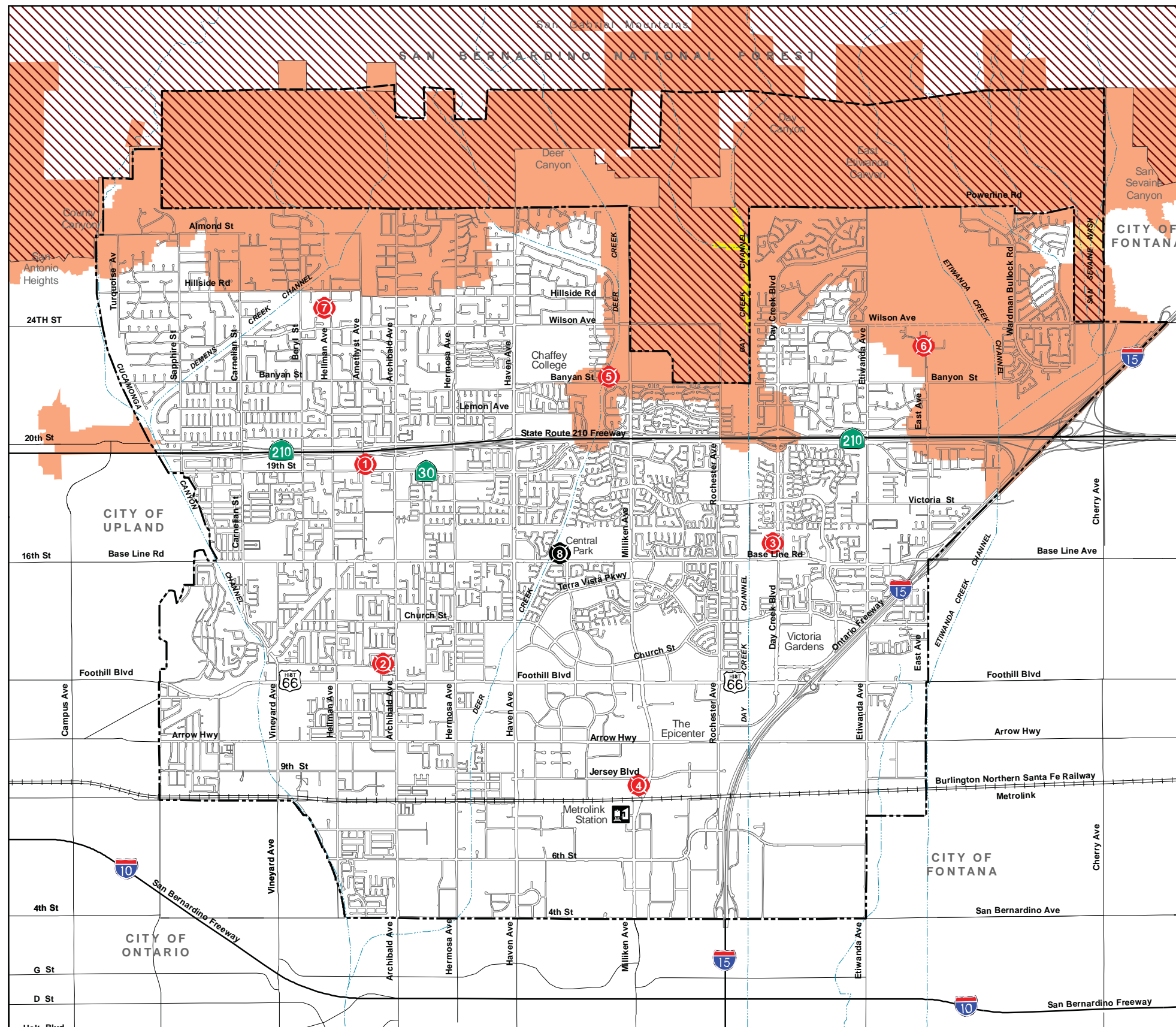
Rancho Cucamonga General Plan Update

Source: Ontario General Plan, Figure LU-6: Airport Environs, 2009; Exhibit 1-7, Compatibility Factors: Airspace. Mead & Hunt, Inc. 2009.

Exhibit 4.8-1



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Fire Protection Responsibility Areas¹

- Federal and State Responsibility Areas
- Local Responsibility Areas (LRA) - Incorporated

Fire Hazards Severity Zones²

- Moderate
- High
- Very High

Fire Stations

- Existing Fire Stations (2009)
 1. Fire Station No. 171
 2. Fire Station No. 172
 3. Fire Station No. 173
 4. Fire Station No. 174
 5. Fire Station No. 175
 6. Fire Station No. 176
 7. Fire Station No. 177
- Future Fire Station
 8. Fire Station No. 178

Base Map

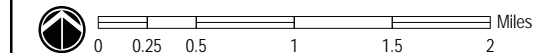
- Rancho Cucamonga City Boundary
- Sphere of Influence

Note: 1. This data depicts the official map of Fire Hazard Severity Zones in the State Responsibility Area of California as adopted by CAL Fire on November 7, 2007.

Website: http://frap.cdf.ca.gov/webdata/maps/san_bernardino_sw/fhszs_map.62.pdf

2. This data depicts the final CAL Fire recommendations for Very High Fire Hazards Severity Zones (VHFHSZ) in Local Responsibility Areas as of November 13, 2008. The data DOES NOT depict the final adopted map since local government can add additional VHFHSZ's after receiving recommendations from CAL Fire. Users are directed to contact the appropriate local entity (County, City, Fire Department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

Website: http://frap.cdf.ca.gov/webdata/maps/san_bernardino_sw/fhsz1_map.62.pdf



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Fire Hazard Severity Zones

Rancho Cucamonga General Plan Update

Source: City of Rancho Cucamonga, 2007, California Department of Forestry and Fire Protection, 2008.

Exhibit 4.8-2



Hazardous Materials

There are numerous users, handlers, generators and transporters of hazardous materials and wastes in the Study Area. Review of Federal and State databases shows that various industrial and commercial operations use hazardous materials in quantities that require them to report to regulatory agencies. A total of 2,611 hazardous materials sites have been identified within the Study Area; however, some facilities report to a number of regulatory agencies and thus, are repeatedly listed in several databases. A complete listing and description of each of each site is included in Appendix F.

4.8.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The project would result in a significant adverse impact related to hazards and hazardous materials if it would:

- Threshold 4.8a:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Threshold 4.8b:** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Threshold 4.8c:** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Threshold 4.8d:** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- Threshold 4.8e:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- Threshold 4.8f:** For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Threshold 4.8g:** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or,
- Threshold 4.8h:** Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.8.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address the protection of people and property from hazards and hazardous materials. Implementation of these goals and policies and their corresponding implementation actions would reduce hazards to existing and future developments in the City. These include:

Policy LU-8.3: Require adequate access for emergency vehicles and evacuations.

Implementation Action: *Continue to coordinate the review of development proposals within hillside areas with emergency personnel.*

Policy PS-1.2: Strive to limit loss of life and property as a result of wildland fires through adequate wildland fire protection services, education and enforcement of defensible space and brush clearance requirements, and wildland fire evacuation and preparedness plans.

Implementation Action: *Expand the information tools utilized by the City in coordination with the Fire District to provide educational materials on how to minimize risks associated with wildland fires.*

Policy PS-2.4: Regularly review and update emergency evacuation plans that are in place in the event of emergencies and/or disasters.

Implementation Action: *Annually review and update as necessary the Hazard Mitigation Plan and Emergency Operations Plan.*

Goal PS-3: Protect City residents, businesses, and employees from the potential hazards associated with the use, storage, transport, and disposal of hazardous materials in and through Rancho Cucamonga.

Policy PS-3.1: Continue to coordinate hazardous material planning and appropriate response efforts with other City departments, as well as local, County, and State agencies to further improve readiness to mitigate local impacts resulting from hazardous material-induced emergencies.

Implementation Action: *Continue to coordinate with adjacent jurisdictions regarding plans for responding to hazardous materials-induced emergencies.*

Policy PS-3.2: Identify and regulate businesses that handle hazardous materials in Rancho Cucamonga.

Implementation Action: *Continue to enforce Federal and State regulations for the storage and use of hazardous materials. Conduct regular inspections of businesses involved in the use and storage of same.*

Policy PS-3.3: Educate residents and businesses about proper disposal methods of household hazardous waste, and the availability of less toxic materials that can be used in place of more toxic household materials.

Implementation Action: *Continue to provide education materials to City residents regarding the proper handling and disposal of hazardous wastes, and continue to maintain a convenient drop-off facility for disposal.*

Policy PS-9.1: Participate in the Airport Land Use Compatibility Plan and Technical Advisory Committee for LA/Ontario International Airport to protect Rancho Cucamonga interests regarding land use and safety.

Implementation Action: *Continue to participate in the Technical Advisory Committee regarding the LA/Ontario International Airport Land Use Compatibility Plan to protect Rancho Cucamonga interests regarding land use and safety.*

Policy PS-9.4: Create policies or procedures that provide flexibility regarding how prospective buyers and tenants of properties within the LA/Ontario International Airport Influence Area are informed of potential aircraft overflight impacts.

Implementation Action: *Upon completion of the LA/Ontario International Airport Land Use Compatibility Plan, determine approach to address airspace protection (FAR Part 77) and overflight notification.*

4.8.5 STANDARD CONDITIONS OF APPROVAL

SC 4.8-1 Future development and redevelopment shall comply with the Hazardous Materials Transportation Act, as administered by the U.S. Department of Transportation, and which governs the transport of hazardous materials, such as contaminated soil, asbestos, or lead-containing materials. Vehicles transporting hazardous waste materials are required to comply with the regulations, as implemented by the California Department of Transportation (Caltrans).

SC 4.8-2 Future development and redevelopment shall comply with the Resource Conservation and Recovery Act regarding the generation, transportation, treatment, storage, and disposal of hazardous waste; the management of non-hazardous solid wastes; and underground tanks that store petroleum and other hazardous substances. As part of this Act, corrective action by the owner or operator of the leaking underground storage tank (LUST) or clean up of LUSTs by the USEPA would reduce hazards associated with ground and water contamination by tank leaks, spills, or accidental releases.

SC 4.8-3 Future development and redevelopment shall comply with the California Hazardous Waste Control Act, which regulates facilities that generate or treat hazardous wastes. Permits for individual facilities allow the Department of Toxic Substances Control (DTSC) and/or the Certified Unified Program Agency (CUPA, in this case the San Bernardino County Fire Department) to inspect the facilities for compliance and to enforce the provision of the Act.

SC 4.8-4 As the designated CUPA, the San Bernardino County Fire Department shall implement the State and Federal regulations for all future development and redevelopment related to:

- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- California Accidental Release Prevention Program;
- Underground Storage Program;
- Aboveground Petroleum Storage Act Program;

- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs; and
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

SC 4.8-5 Future development and redevelopment shall comply with the California Accidental Release Prevention Program (CalARP), which prevents the accidental release of regulated toxic and flammable substances. It does so by requiring stationary sources using hazardous materials that exceed a threshold quantity to develop and submit a Risk Management Plan that addresses the potential impacts of accidental hazardous materials releases and that includes measures to reduce hazards through prevention, response, and remediation measures.

SC 4.8-6 Future development and redevelopment shall comply with South Coast Air Quality Management District (SCAQMD) Rule 1403, which provides guidelines for the proper removal and disposal of asbestos-containing materials. In accordance with Rule 1403, structures that may contain asbestos are required to be subject to an asbestos survey by a Certified Asbestos Consultant (certified by the Occupational Safety and Health Administration [OSHA]) to identify building materials that contain asbestos. Asbestos removal should include prior notification (to the SCAQMD) and compliance with removal procedures and time schedules; asbestos handling and clean-up procedures; and storage, disposal, and land filling requirements under this rule.

SC 4.8-7 Future development and redevelopment shall comply with the *California Code of Regulations* (Title 8, Section 1532.1), which requires removal of lead-based paint or other materials containing lead to be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. All demolition that could result in the release of lead must be conducted to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.

SC 4.8-8 Future development and redevelopment shall comply with the *California Health and Safety Code* (Sections 39650 et seq.) and the *California Code of Regulations* (Title 8, Section 1529), which prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to Federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. The standards were developed to protect the general population and construction workers from respiratory and other hazards associated with exposure to these materials.

SC 4.8-9 Future development and redevelopment shall comply with Part 77 of the Federal Aviation Regulations (FAR), which requires notification the Federal Aviation Administration (FAA) to be notified of any project that may encroach upon established navigable airspace. Once notified, the FAA is responsible for the review of site and building plans to determine the effects of proposed construction on air navigation. Measures are then identified to ensure the continued safety of air navigation. Likewise, FAA notification, review, and approval are required for any construction or alteration of a temporary or

permanent structure, equipment, highway, railroad, roadway, or natural growth that:

- Is more than 200 feet in height
- Extends into an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway that is 3,200 feet or longer
- Extends into an imaginary surface extending outward and upward at a slope of 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway that is less than 3,200 feet long.

SC 4.8-10 Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbecues and grills, and firebreak fuel modification areas are imposed on new developments.

SC 4.8-11 The State Board of Forestry and the California Department of Forestry and Fire Protection (CDF) shall continue to implement the California Fire Plan for all Future development, redevelopment, and existing development within the City of Rancho Cucamonga or the City's Sphere of Influence, to reduce wildland fire hazards at the San Bernardino National Forest and foothills in Rancho Cucamonga.

SC 4.8-12 The City shall implement its Fire Protection District Strategic Plan to increase fire protection and emergency services in the northern end of the City. The Strategic Plan calls for continued efforts to assess and identify high risk areas in the community, development of seasonal programs to communicate the mitigation program goals and objectives to the public, development of fuel modification/brush abatement programs, and a gates and lock access program. The District's Wildland Fire Team shall continue to hone their skills on wildland firefighting techniques, as well as test preparation plans and inter-department communications.

4.8.6 ENVIRONMENTAL IMPACTS

Transport, Use, and Disposal of Hazardous Materials

Threshold 4.8a: **Would the proposed General Plan Update create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Future development and redevelopment pursuant to the proposed 2010 General Plan Update may utilize or generate hazardous materials or wastes in quantities that would pose a significant hazard to the public. In addition, small business operations, individual households, and maintenance activities are likely to utilize hazardous materials in limited quantities, such as paints, thinners, cleaning solvents, fertilizers, pesticides, motor oil, and automotive substances. These hazardous materials would be stored and used at individual sites and may create a

public health and safety hazard through routine transport, use, or disposal. Construction activities associated with new development and redevelopment would also involve the use of hazardous materials for construction. These would include paints, thinners, solvents, acids, curing compounds, grease, oils, and other chemicals, which could pose risks to construction workers or lead to soil and groundwater contamination, if not properly stored, used, or disposed.

Compliance with existing hazardous material regulations would prevent undue hazards. A number of existing regulations ensure that industrial and commercial users, generators, and transporters provide operational safety and emergency response measures so that no major threats to public health and safety are created. These include the Hazardous Material Transportation Act (SC 4.8-1), the Resource Conservation and Recovery Act (4.8-2), the California Hazardous Waste Control Act (SC 4.8-3), the Certified Unified Program Agency (CUPA) (SC 4.8-4), and the California Accidental Release Prevention Program (SC 4.8-5). Also, the Rancho Cucamonga Household Hazardous Waste Facility accepts small quantities of hazardous materials for proper disposal, discouraging the dumping of these materials into the garbage, the storm drain, or the ground.

Goal PS-3 of the Public Health and Safety Element of the proposed 2010 General Plan Update also seeks to protect City residents, businesses, and employees from the potential hazards associated with the use, storage, transport, and disposal of hazardous materials in and through Rancho Cucamonga. Supporting policies include coordination with various agencies to further improve readiness to mitigate local impacts resulting from hazardous material-induced emergencies (Policy PS-3.1); identification and regulation of businesses that handle hazardous materials (Policy PS-3.2); and education of residents and businesses about proper disposal methods and the availability of less toxic materials that can be used in place of more toxic household materials (Policy PS-3.3).

Impacts would be less than significant since hazardous material use, transport, and disposal would occur in accordance with existing regulations and in compliance with the proposed 2010 General Plan Update.

Impact 4.8a: Future development and redevelopment would comply with applicable hazardous materials regulations (SCs 4.8-1 through 4.8-5), impacts would be less than significant; no mitigation is required.

Accidental Release of Hazardous Materials

Threshold 4.8b: Would the proposed General Plan Update create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Future development and redevelopment in the City may include industrial and commercial uses that would utilize large quantities of hazardous materials. As discussed above, these users would be subject to various State and Federal regulations on storage, use, handling, transport or disposal of hazardous materials and hazardous wastes. Compliance with pertinent regulations would avoid the creation of a significant hazard to the public and reduce the potential for the release of hazardous materials into the environment.

There are sites in the City that have historically used or produced hazardous materials, and redevelopment of these sites may lead to the exposure or release of hazardous materials in existing structures (such as asbestos and lead-based paint) or in the ground. Compliance with the following SCs would allow for the clean-up of sites prior to their redevelopment and reuse:

SCAQMD Rule 1403 (SC 4.8-6), the Cal-OSHA regulations on asbestos abatement (SC 4.8-8), the Cal-OSHA regulations on lead abatement (SC 4.8-7), required soil or groundwater remediation under the Resource Conservation and Recovery Act (SC 4.8-2), the California Hazardous Waste Control Act (SC 4.8-3), CUPA (SC 4.8-4), and the California Accidental Release Prevention Program (SC 4.8-5). Thus, potential hazards would be removed or remediated, and impacts would be less than significant.

Impact 4.8b: Future development and redevelopment would comply with existing regulations (SC 4.8-2 through 4.8-8) and would not create a significant hazard associated with the release of hazardous materials into the environment. Impacts would be less than significant and no mitigation is required.

Impacts to Schools

Threshold 4.8c: Would the proposed General Plan Update emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

While most schools are or would be located near residential areas where hazardous materials use would be limited, future development and redevelopment pursuant to the proposed 2010 General Plan Update may be located within 0.25 mile of an existing or proposed school. Developments that emit hazardous emissions or handle hazardous or acutely hazardous materials may pose hazards to nearby school children in the event of an accidental release or spill.

However, compliance with existing hazardous material regulations would prevent undue hazards. These include the Hazardous Material Transportation Act (SC 4.8-1), the Resource Conservation and Recovery Act (4.8-2), the California Hazardous Waste Control Act (SC 4.8-3), Certified Unified Program Agency (CUPA) (SC 4.8-4), and the California Accidental Release Prevention Program (SC 4.8-5). Also, the City of Rancho Cucamonga Household Hazardous Waste Facility accepts small quantities of household hazardous materials for disposal, discouraging the dumping of these materials into the garbage, the storm drain, or the ground. Therefore, impacts related to the exposure of school-aged children to hazardous emissions, materials, substances, or wastes would be less than significant assuming compliance with applicable standard conditions.

Impact 4.8c: Future development and redevelopment that would emit hazardous emissions would need to comply with existing regulations (SCs 4.8-1 through 4.8-5) to prevent hazards to existing and proposed schools. Impacts would be less than significant and no mitigation is required.

Known Hazardous Materials

Threshold 4.8d: Would the proposed General Plan Update be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

There are facilities in the City and its SOI that handle hazardous materials and are listed on various databases for hazardous materials. Of the known hazardous materials sites within the Study Area, 46 of these facilities were identified as having a high potential for, or known release

of, hazardous substances into the ground, groundwater, or surface waters (LGI 2009). These facilities are listed below by location and/or ownership.

- 6th Street/Hellman Avenue
- 9805 6th Street, Suite 104, Brownwood Furniture Incorporated
- 9810 6th Street, Hartwell Corporation
- 12150 6th Street, Mobil Oil Corporation
- 8477 Archibald Avenue
- 9393 Arrow Highway, Intermetro Industries Corporation
- 11200 Arrow Highway, Steelscape Incorporated
- 11711 Arrow Highway, Schlosser Forge Company
- 12167 Arrow Highway, Soil Treatment, Rancho Cucamonga
- 12281 Arrow Highway, Parallel Products of California
- 12281 Arrow Highway
- 12451 Arrow Highway, CMC Fontana Steel
- 12455 Arrow Highway, Ameron International
- 12455 Arrow Highway, Ameron International Concrete and Steel Pipe GRP
- 12459 Arrow Highway, Tamco
- 12459 Arrow Highway A, TI Wire
- 9133 Center Avenue, Metal Coaters of California, Incorporated
- 8939 Etiwanda Avenue, Sterling Can Corporation
- 8996 Etiwanda Avenue, Generating Station, Etiwanda
- 9082 Foothill Boulevard, Unocal #6972
- 12549 Foothill Boulevard
- 5885 Haven Avenue
- 7211 Haven Avenue, Terra Vista Cleaners
- 9060 Haven Avenue, Degussa Construction Chemicals Operations, Inc.
- 8613 Helms Avenue
- 8740 Hellman Avenue, Vacuum Metalizing Company, Inc.
- Arlon Materials for Electronics Division
- 9433 Hyssop Drive
- 8786 Industrial Lane
- 8875 Industrial Lane, Western Metal Decorating Company
- 10667 Jersey Boulevard, Robert Manufacturing Company
- 11000 Jersey Boulevard, PAC Rancho, Incorporated
- 11155 Jersey Blvd, Suite K, Precision Aerospace Corporation
- 11239 Jersey Boulevard, Rancho Cucamonga Fire Station #174
- 11266 Jersey Boulevard, General Latex and Chemical Corporation
- 11559 Jersey Boulevard, Mission Foods Rancho Cucamonga
- 10477 Lemon Avenue
- 6539 Milliken Avenue
- 8530 Milliken Avenue, Innovative Polymer Systems Incorporated
- 8075 Monet Avenue, Chevron 301784
- 9121 Pittsburg Avenue
- 9060 Rancho Park Court, Studio 1
- 9420 Santa Anita Avenue, Pacer Technology
- 11060 Tacoma Drive, Alshin Tire Corp
- Victoria Avenue/East Avenue, Etiwanda High School Expansion

Future development and redevelopment pursuant to the proposed 2010 General Plan Update may include uses that handle hazardous materials and are likely to include the same industries currently found in the City. Also, existing facilities that are listed in the databases may be redeveloped to other uses in the future. Thus, redeveloped sites and/or new uses that would handle or use hazardous materials may occur under the proposed 2010 General Plan Update.

As discussed above, the proposed 2010 General Plan Update contains a goal and policies to reduce hazards from hazardous material use. Also, compliance with the following existing regulations would prevent the creation of threats to public health and safety: the Hazardous Material Transportation Act (SC 4.8-1); the Resource Conservation and Recovery Act (SC 4.8-2), the California Hazardous Waste Control Act (SC 4.8-3), the CUPA (SC 4.8-4); and the California Accidental Release Prevention Program (SC 4.8-5). Thus, impacts would be less than significant; no mitigation is required.

Impact 4.8d: Future development may include facilities that would be listed in government databases. Redevelopment on sites currently listed on databases may also occur. Compliance with existing regulations (SCs 4.8-2 through 4.8-5) would reduce impacts to less than significant; no mitigation is required.

Airport Hazards

Threshold 4.8e: For areas located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed General Plan Update result in a safety hazard for people residing or working in the project area?

There is no airport in the City of Rancho Cucamonga. The nearest airport to the City is the LA/Ontario International Airport, located approximately 1.2 miles south of the City's southern boundary.

The LA/Ontario International Airport serves commercial aircraft, air taxis, military aircraft, and general aviation plans. In 2007, a total of 7.2 million passengers and 533,000 tons of cargo passed through the airport on approximately 148,000 flights. At this airport, no aboveground structures are allowed within, what the airport designates as "Object Free Zones"; these are designated along both sides of the runways. The Runway Safety Area (RSA) is the area surrounding the runway that is suitable for reducing the risk or damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. In addition, Object Free Zones are designated along taxiways and in between runways. Runway Protection Zones (RPZs) are found at the ends of the runways (formerly Clear Zones); these are trapezoidal areas at the end of the runways which define the takeoff and landing areas. The RPZs are not allowed to have tall buildings; uses that have the potential for explosion; that generate electric interference, distracting lights, glare, dust or smoke; that attract birds; or that accommodate/promote public assembly. The RPZs are located within the airport property or the areas to the east and west of the LA/Ontario International Airport. They do not extend into the City of Rancho Cucamonga.

However, the future development and redevelopment in the City's southern section may extend into the navigable airspace of LA/Ontario International Airport and could affect aircraft landing and take-off operations. Future development and redevelopment within this area would need to comply with FAR Part 77 regarding height limitations in order to prevent hazards to users, occupants, and visitors of the development and to prevent obstruction to aircraft operations (SC 4.8-9). Compliance with these regulations would allow the FAA to review development

plans, to identify/prevent potential hazards to aircraft navigation, and to prevent exposure of persons or workers to aircraft hazards.

Cable Airport in the City of Upland is located approximately 3.5 miles west of Rancho Cucamonga, and the RPZ for this airport does not extend into the City. Aircraft operations at this airport would not be adversely affected by future development or redevelopment in the City, nor would development in the City affect activities at this airport.

Impact 4.8e: Compliance with FAA Part 77 guidelines (SC 4.8-9) would avoid obstructions to LA/Ontario International Airport's navigable airspace that may occur from future development and/or redevelopment in the City. Impacts would be less than significant; no mitigation is required.

Airstrip Hazards

Threshold 4.8f: For areas within the vicinity of a private airstrip, would the proposed General Plan Update result in a safety hazard for people residing or working in the project area?

There are no private airstrips within the City; thus, no hazards from airstrips would occur to future development and/or redevelopment.

Impact 4.8f: No impact related to hazards from private airstrips would occur with future development and redevelopment in the City; no mitigation is required.

Emergency Response

Threshold 4.8g: Would the proposed General Plan Update impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. The SR-210 Freeway runs east-west through the City and the I-15 Freeway runs along its eastern edge. The I-10 Freeway is also located just 1 mile south of the City and runs in an east-west direction through the region. These freeways provide areawide evacuation routes, with major north-south and east-west roadways in the City connecting to the freeways and adjacent cities.

Redevelopment in the City would be located on sites that have existing access to public roadways and would not interfere with emergency response or evacuation of adjacent sites. Future development on scattered, vacant infill lots would also have direct roadway access and would not interfere with emergency response or evacuation of adjacent sites.

Future development at the northern section of the City and SOI would occur at the hillsides where access would have to be provided.

In the proposed 2010 General Plan Update, Policy PS-1.2 seeks to limit loss of life and property as a result of wildland fires through adequate wildland fire protection services; education on defensible spaces and brush clearance; and wildland fire evacuation and preparedness plans. Policy PS-2.4 calls for the regular review and update emergency evacuation plans that are in place in the event of emergencies and/or disasters. Policy LU-8.3 requires the provision of adequate access for emergency vehicles and evacuations.

The City's Emergency Management Division is responsible for maintaining and updating the City's emergency plans, which includes evacuation plans. In addition, the Rancho Cucamonga Fire Protection District requires a Fire Protection Plan for all development within hazardous fire areas (SC 4.8-10). The plan must address, among other things, access issues.

As part the Fire District reviews development plans, they assess the available emergency access into and out of individual developments for fire-fighting equipment. This review will ensure that future development and redevelopment would not interfere with emergency response or evacuation. Thus, impacts would be less than significant; no mitigation is required.

Impact 4.8g: Future development and/or redevelopment under the proposed 2010 General Plan Update are not expected to interfere with emergency response and evacuation, with compliance with existing Fire District regulations for access and project review (SC 4.8-10). Impacts would be less than significant; no mitigation is required.

Wildland Fires

Threshold 4.8h: Would the proposed General Plan Update expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Future development and redevelopment at the northern end of the City and within the SOI would be exposed to wildland fire hazards, especially in areas in designated Very High Fire Hazard Severity Zones. The large undeveloped areas, steep slopes, and Santa Ana winds could result in a significant risk of loss, injury, or death, as has occurred in the past, which would represent a significant impact. However, the City recognizes this risk and has policies that limit uses to Very Low density residential development (less than 2 units per acre) and Hillside residential uses (0.1 to 2 units per acre) in these areas to limit the number of persons and property exposed to wildland fire hazards. It has also developed Policy PS-1.2, which calls for wildland fire protection services; education on defensible spaces and brush clearance; and wildland fire evacuation and preparedness plans.

The State Board of Forestry and the California Department of Forestry and Fire Protection (CDF) shall implement the California Fire Plan, to reduce wildland fire hazards at the San Bernardino National Forest and foothills in Rancho Cucamonga (SC 4.8-11). The City's Fire Protection District also has a Strategic Plan to reduce the threat of wildland fires (SC 4.8-12). Additionally, the City requires all new development within hazardous fire areas to prepare a Fire Protection Plan that outlines measures for adequate water supply, emergency access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management (SC 4.8-10). In addition to these SCs, implementation of MM 4.8-1 would reduce impacts to less than significant levels.

Impact 4.8h: Potential wildland fire hazards at the northern end of the City and its SOI would represent a potentially significant impact. Compliance with Policy PS-1.2 and SCs 4.8-10, 4.8-11, and 4.8-12 as well as implementation of MM 4.8-1 would reduce impacts to less than significant levels.

4.8.7 CUMULATIVE IMPACTS

The cumulative impacts related to hazards and hazardous materials are analyzed on a County-wide basis. Existing developments in the County pose risks to public health and safety, as they

relate to hazards and hazardous materials. Future development and/or redevelopment in the City and in the rest of the County will increase these risks as more facilities or operations utilize hazardous materials; are located near airports; and are developed in hillside areas in Very High Fire Hazard Severity Zones.

There are existing regulations on a variety of activities and uses relating to health and safety at all levels of government. Future development projects in the County would also need to be made part of emergency planning efforts for natural or manmade disasters that may occur in the area. Compliance of individual projects with pertinent regulations would preserve public health and safety. Thus, new developments in the County are not expected to present significant risks to public health and safety.

Hazardous material explosions or contamination may potentially occur with future commercial and industrial developments that would handle these materials in large quantities. State, Federal, and County agencies are responsible for regulating hazardous materials use, storage, handling, generation, transport and disposal. Monitoring and enforcement by the San Bernardino County Fire Department would ensure compliance with existing regulations.

Future development and redevelopment would also be subject to review and approval by the Rancho Cucamonga Fire District, other jurisdictional fire agencies, and the County Fire Department for fire safety and preparedness; this review and approval would also ensure adequate emergency access and evacuation. Compliance with pertinent requirements of the fire agencies would prevent the creation of fire hazards. Impacts are expected to be less than significant.

Compliance by individual developments and facilities with existing health and safety regulations would prevent or reduce the creation of health risks and public safety hazards. No cumulative adverse impacts are expected.

4.8.8 MITIGATION MEASURES

MM 4.8-1: Future development and redevelopment shall comply with Chapter 7A of the California Building Code (CBC), which includes building standards for the Wildland-Urban Interface Fire Area. The standards call for the use of ignition-resistant materials and design to inhibit the intrusion of flame or burning embers projected by a vegetation fire and help reduce losses resulting from repeated cycles of interface fire disasters. These standards shall apply to the areas within the designated Very High Fire Hazard Severity Zone at the northern end of the City and Sphere of Influence (SOI).

4.8.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Transport, Use, and Disposal of Hazardous Materials

Less Than Significant.

Accidental Release of Hazardous Materials

Less Than Significant.

Impacts to Schools

Less Than Significant.

Known Hazardous Materials

Less Than Significant.

Airport Hazards

Less Than Significant.

Airstrip Hazards

Less Than Significant.

Emergency Response

Less Than Significant.

Wildland Fires

Less Than Significant With Mitigation.

Cumulative Impacts

Less Than Significant.

4.9 HYDROLOGY AND WATER QUALITY

This section analyzes potential impacts on hydrology and water quality based on a review of existing publications and regulations.

4.9.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Clean Water Act and National Pollutant Discharge Elimination System

In 1972, the Federal Water Pollution Control Act (Clean Water Act [CWA]) was amended to require National Pollutant Discharge Elimination System (NPDES) permits for the discharge of pollutants to “Waters of the U.S.” from any point source. In 1987, the CWA was again amended to require that the U.S. Environmental Protection Agency (USEPA) establish regulations for permitting under the NPDES permit program for municipal and industrial storm water discharges. The USEPA published final regulations regarding storm water discharges on November 16, 1990. The regulations require that municipal separate storm sewer system (MS4) discharges to surface waters be regulated by an NPDES permit. MS4s are a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), and are owned or operated by a public body that has jurisdiction over the disposal of sewage, industrial wastes, storm water, or other wastes. The MS4s are designated or used for collecting or conveying storm water only (i.e., not wastewater or combined sewage).

In addition, the CWA requires States to adopt water quality standards for water bodies for USEPA approval. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents, such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements which represent the quality of water that supports a particular use. Because California had not established a complete list of acceptable water quality criteria, the USEPA established numeric water quality criteria for certain toxic constituents in the form of the California Toxics Rule (see 40 *Code of Federal Regulations* §131.38).

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP), which provides flood insurance, floodplain management, and flood hazard mapping. Communities subject to flood hazards voluntarily participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce the potential for flood damage. In turn, the NFIP offers Federally funded flood insurance to homeowners, renters, and business owners in participating communities. Under this program, FEMA produces Flood Insurance Rate Maps (FIRM) that identify properties and buildings in flood insurance risk areas. Flood hazards related to storm events are generally described in terms of 100- or 500-year floods. These are floods that, respectively, have a 1 percent and 0.2 percent chance of occurring every year.

Emergency Action Plans for Dams

Because dam failure can have severe consequences, FEMA requires that all dam owners develop Emergency Action Plans (EAP) that specify warning, evacuation, and post-flood actions to be implemented in the event of dam failure. Although there may be coordination with County

officials in the development of the EAP, the responsibility for developing potential flood inundation maps and facilitation of emergency response is the responsibility of the dam owner.

State

California Porter-Cologne Act

Although it does establish certain guidelines for program development, the CWA places the primary responsibility for the control of water pollution and for planning the development and use of water resources with the States. California's primary statute governing water quality and water pollution issues is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) broad powers to protect water quality and is the primary vehicle for implementing California's responsibilities under the Federal CWA. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to (1) adopt plans and policies; (2) regulate discharges to surface water and groundwater; (3) regulate waste disposal sites; and (4) require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, and oil or petroleum products.

Each RWQCB must formulate and adopt a water quality plan (or Basin Plan) for its region. The regional plans conform to the policies set forth in the Porter-Cologne Act and those established by the SWRCB in its State Water Policy. The Porter-Cologne Act also enables the RWQCBs to include water discharge prohibitions applicable to particular conditions, areas, or types of waste within its regional plan. The RWQCBs are also authorized to (1) enforce discharge limitations; (2) take actions to prevent violations of these limitations from occurring; and (3) conduct investigations to determine the status of the quality of any of the waters of the State. Civil and criminal penalties are imposed on persons who violate the requirements of the Porter-Cologne Act or any SWRCB/RWQCB orders.

Safe Water Drinking Act

The Safe Water Drinking Act of 1974 regulates public drinking supplies to protect public health and safety. The law is designed to protect drinking water and water sources such as rivers, lakes, reservoirs, springs, and groundwater wells.

NPDES Construction General Permit

Pursuant to CWA Section 402(p), which requires regulations for permitting of certain storm water discharges, the SWRCB has issued a Statewide General NPDES Permit for storm water discharges from construction sites (NPDES No. CAS000002, California Water Resources Control Board Resolution No. 2001-046; Modification of Water Quality Order 99-08-DWQ, SWRCB, NPDES, General Permit for Storm water Discharges Associated with Construction Activity). This permit was revised on September 2, 2009, and is now Construction General Permit Order 2009-0009-DWQ. Construction activities subject to this permit include clearing, grading, and ground disturbances such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

Under the Construction General Permit, storm water discharges from construction sites with a disturbance area of one acre or more are required to either obtain individual NPDES permits for storm water discharges or be covered by the Construction General Permit. Coverage under the Construction General Permit coverage is obtained by completing and filing a Notice of Intent

(NOI) with the SWRCB and preparing a Storm Water Pollution Prevention Plan (SWPPP) prior to any land disturbance. The SWPPP identifies erosion control, sediment control, tracking control, wind erosion control, waste management, and non-storm water management best management practices (BMPs) that would be implemented during the construction phase to reduce or eliminate pollutants entering the storm drain system.

Dam Safety and Inundation Maps

Dams with heights greater than 25 feet or storage capacities of more than 50 acre-feet are regulated and monitored for structural safety by the California Department of Water Resources, Division of Safety of Dams in accordance with Division 3 of the *California Water Code*. Dam regulations substantially reduce the chance of catastrophic failure in the event of an earthquake or dam failure.

In addition, Section 8589.5 of the *California Government Code* requires dam owners to provide the Governor's Office of Emergency Services with an inundation map showing the extent of damage to life and property that would occur given a complete and sudden dam failure at full capacity. These maps facilitate emergency planning and response by dam operators, Cities, and Counties affected by inundation hazards.

Regional

Water Quality Control Plan for the Santa Ana River Basin

The *Water Quality Control Plan for the Santa Ana River Basin* (also the Basin Plan for the Santa Ana Region, hereafter referred to as the "Basin Plan") seeks to preserve and enhance water quality and to protect the beneficial uses of water bodies in the Santa Ana River watershed. The Basin Plan discusses the existing water quality, beneficial uses of the groundwater and surface waters, and local water quality conditions and problems within the Santa Ana River watershed. The Basin Plan provides water quality standards for water resources in the Santa Ana River and its watershed, and includes an implementation plan to maintain these standards. The standards serve as the basis for the basin's regulatory programs.

Basin Plan implementation occurs primarily through issuance of individual Waste Discharge Requirements (WDRs); discharge prohibitions; water quality certifications; programs for salt management, non-point sources, and storm water; and monitoring and regulatory enforcement actions, as necessary.

An amendment to the Basin Plan is currently in progress, which would revise the definition and water quality objectives related to beneficial uses for REC-1 (water contact recreation) and REC-2 (non-contact water recreation).

Municipal Separate Storm Sewer System (MS4) Permit

In 2002, the Santa Ana RWQCB issued an NPDES Storm Water Permit and WDRs (Order No. R8-2002-0012) under the CWA and the Porter-Cologne Act for discharges of storm water runoff, snowmelt runoff, surface runoff, and drainage within the Upper Santa Ana River watershed in San Bernardino and Riverside Counties. This permit expired on April 27, 2007 and was administratively extended. Renewal of waste discharge requirements and an NPDES permit for San Bernardino County is in process under Order No. R8-2010-0036, NPDES No. CAS618036.

The City of Rancho Cucamonga is within the jurisdiction of the Santa Ana RWQCB and is subject to the waste discharge requirements of the MS4 Permit for San Bernardino and Riverside Counties and the proposed permit for San Bernardino County. The County and cities within the County are co-permittees under the MS4 permit, and have legal authority to enforce the terms of the permit in their jurisdictions.

The ultimate goal of the MS4 Permit and the related urban storm water management program is to protect the beneficial uses of the receiving waters.¹ To implement the requirements of the permit, the County developed guidelines to control and mitigate storm water quality and quantity impacts to receiving waters as a result of new development and redevelopment. The guidelines require the development of a Water Quality Management Plan that identifies post-construction BMPs to reduce discharges of pollutants into storm water.

Water Quality Management Plan

The NPDES Permit and WDRs for the Upper Santa Ana River watershed (Order No. R8-2002-0012) requires co-permittees to develop and implement programs for storm water management within San Bernardino and Riverside Counties, which would regulate the discharge of pollutants into the storm water and/or runoff into the storm drain system and receiving waters within the area covered by the NPDES permit.

In compliance with this permit, the San Bernardino County Department of Public Works' Storm Water Program contains guidelines for the preparation of Water Quality Management Plans (WQMPs) by new development and major redevelopment projects of specific land uses and sizes. A WQMP is required as part of the permit process and commits the developer to the implementation of long-term BMPs. Individual WQMPs need to identify pollutants of concern based on the proposed land use and site activities, and select applicable site design, source control, and treatment control BMPs that would effectively prohibit non-storm water discharges from entering the storm drain system and that would reduce the discharge of pollutants from storm water conveyance systems to the maximum extent possible. The WQMP also calls for the on-site retention of storm water to prevent hydrologic conditions of concern (HCOC)—including flooding, erosion, scour, sedimentation, natural habitats, vegetation stress, slope stability, water quality degradation, and altered flow regime at downstream water channels/bodies—if the facilities have not been engineered to their ultimate capacities or if natural conditions are present.

Santa Ana River Mainstream Project

The Counties of Orange, Riverside, and San Bernardino are working with the U.S. Army Corps of Engineers (USACE) to design and construct the Santa Ana River Mainstream project. This project will provide increased flood protection to the communities within the three counties, and will include specific environmental restoration projects. The Mainstream Project will cover 75 miles from the Santa Ana River headwaters to its mouth, providing the upper and lower Santa Ana River Basin with flood protection levels ranging from 100-year to 190-year flood flows. Structural improvements have been completed at Seven Oaks Dam and are planned at Mill Creek Levee, San Timoteo Creek, Prado Dam, Oak Street Drain in Corona, 23 miles of the lower Santa Ana River, and Santiago Creek. Prado Dam and the spillway will be raised an additional 30 feet in height. Ninety-two acres of marshland located within the Santa Ana River Salt Marsh will be restored to increase the marsh's value as a wetland habitat. In addition, a large portion of Santa Ana Canyon will be purchased, and a resource, habitat, and floodplain

¹ Beneficial uses refers to the various ways that water can be used for the benefit of people and wildlife (i.e., drinking, swimming, agricultural water supply, and support of aquatic habitats).

management plan will be developed to ensure that part of the canyon will not be subject to urban development. Since the City of Rancho Cucamonga is located within the Santa Ana River watershed, this project would improve flood protection in the City while reducing the potential for downstream flooding due to runoff from the City.

Water Rights

Groundwater resources within the Cucamonga and Chino basins that underlie the City are adjudicated. The Chino Basin Watermaster Judgment in 1975 (Case No. RCV 51010—formerly Case No. SCV 164327) regulates groundwater pumping in the Chino Basin by various public and private entities. The Chino Basin Watermaster is responsible for implementing the judgment through the Optimum Basin Management Program. This program calls out groundwater monitoring; development of recharge capabilities, storage, and recovery projects; management of salt loads; development of reclaimed and storm water recharge; and coordination with other agencies to enhance groundwater resources (Chino Basin Watermaster 2009). The adjudication safe yield of the Chino Basin is estimated at approximately 145,000 acre-feet/year (MWD 2007).

Groundwater pumping from the Cucamonga Basin is limited by a 1958 Superior Court judgment, which specifies water rights of individual groundwater producers and the amount that can be exported to non-overlying areas for use by individual producers. Requirements for spreading are included, but no annual reporting is required. No watermaster has been appointed for the Cucamonga Basin. Instead, this basin is operated as part of the Chino Basin. This basin has approximately 22,721 acre-feet/year of groundwater that is considered its adjudication safe yield (MWD 2007).

Local

Floodplain Management Regulations

The City's Floodplain Management Regulations are contained in Chapter 19.12, Floodplain Management Regulations of the Rancho Cucamonga Municipal Code. The City restricts or prohibits structures and land uses within designated floodplains that do not comply with the regulations. The regulations require that development be reasonably safe from flooding and not increase the base flood level by more than one foot where base flood elevations have been determined, but a floodway has not been designated. Projects that involve alteration or relocation of a watercourse are required to notify adjacent communities and the California Department of Water Resources of the relocation, provide the Federal Insurance Administration and FEMA with evidence of such notification, and ensure that the flood-carrying capacity within the altered or relocated portion of the watercourse is maintained.

Floodplain Management Regulations also require that flood hazard reduction measures be implemented in the floodplain areas, which would include anchoring, flood-resistant materials, drainage around structures, elevation of lowest floor above base flood elevation, floodproofing, elimination of floodwater infiltration or discharges from water and sewer lines; prohibition of floodway encroachment; and mobile home and recreational vehicle standards. Regulations for development in mudslide-prone and erosion-prone areas are also included.

Storm Water Discharge Regulations

Chapter 19.20 of the Municipal Code is the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance. The ordinance was adopted to comply with the CWA, the California Porter-Cologne Water Quality Control Act, and the City's NPDES permit, and seeks to protect and enhance the quality of water bodies and water courses. The regulations address

connections to the City's MS4 system, prohibited discharges, compliance with NPDES permits, implementation of BMPs, spill containment, immediate notification and written notification of accidental discharge, and property owner responsibility for illegal discharges.

Drainage Master Plans

The City of Rancho Cucamonga has adopted two drainage master plans for the eastern and the western sections of the City. The drainage master plans establish a means to collect revenue from development in order to offset the cost of constructing the drainage system. The City Master Plan of Drainage-Westside Area applies to the area located primarily between the Deer Creek Channel on the east and the Cucamonga Channel on the west. The Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage, identifies drainage facilities and fees for the area located along the western side of Etiwanda Avenue to the easterly City limits north of 4th Street. These drainage master plans address the flood control needs of a fully developed drainage area and identify the regional and local facilities needed to adequately convey a 100-year storm event.

Areas not covered by the two drainage master plans are expected to provide the needed storm drainage system as outlined in the applicable Specific Plan or Community Plan. Developers within these areas are responsible for completing the necessary drainage facilities not covered by the City's drainage master plans.

4.9.2 EXISTING CONDITIONS

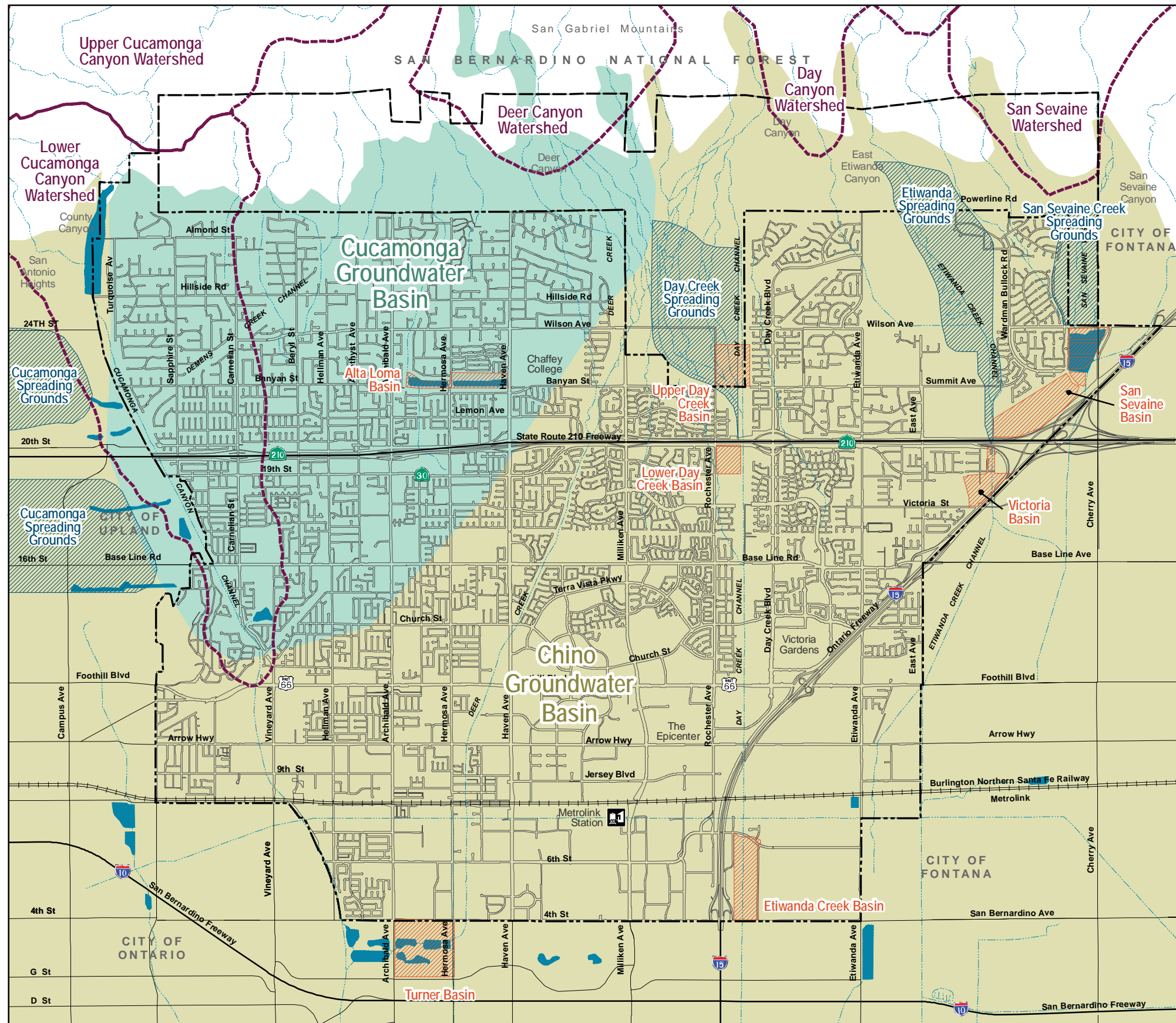
Hydrology

Surface Water

The Santa Ana River drains a 2,620-square-mile area located south of the east-west ridges of the San Gabriel and San Bernardino Mountains and north of the Santa Margarita River watershed. The 100-mile long river generally runs southwesterly from the San Bernardino Mountains north of Seven Oaks Dam toward the San Bernardino and Chino valleys, cutting through the Santa Ana Mountains, and flowing down into the Orange County coastal plain before its outlet at the Pacific Ocean in Huntington Beach. The City of Rancho Cucamonga is located within the watershed of the Santa Ana River. Runoff from the City drains into Reach 3 of the Upper Santa Ana River, which is the segment located between Prado Dam and Mission Boulevard in Riverside County (Santa Ana RWQCB 2008).

Locally, there are four canyon watersheds in the San Gabriel Mountains that direct storm water through the City: the Cucamonga Canyon, Deer Canyon, Day Canyon, and East Etiwanda Canyon watersheds. Two smaller watershed areas—Demens and Hermosa Creeks—are located just south of Cucamonga and Deer Canyons (Rancho Cucamonga 2001a). Exhibit 4.9-1, Major Watersheds, shows the location of the four major watersheds.

The alluvial fans located at the mouth of the San Antonio, Cucamonga, Deer, Day, East Etiwanda, and San Sevaine Canyons are subject to flooding, and flood control basins/spreading grounds have been built to limit the extent of floodwaters on downstream areas. Creeks through the City have also been channelized. Cucamonga Creek, Demens Creek, and Deer Creek drain the western section of the City. Demens and Deer Creeks join Cucamonga Creek, which runs southerly and connects to Chino Creek near the State Route 71 (SR-71) Freeway and to Mill Creek and the Santa Ana River at Prado Park (just east of Prado Dam). Day Creek, Etiwanda Creek, and San Sevaine Creek drain the eastern section of the City. Day Creek and San



Groundwater Basins

- Chino Basin
- Cucamonga Basin

Recharge Basins and Spreading Grounds

- Recharge Basins
- Spreading Grounds

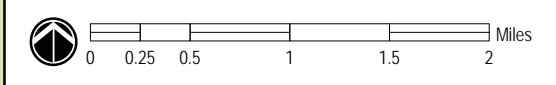
Watersheds

- Watersheds

Base Features

- Rancho Cucamonga City Boundary
- Sphere of Influence
- Waterways

Source: California Department of Water Resources, 1997 and California Resources Agency, 2006.



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Major Watersheds
Rancho Cucamonga General Plan Update

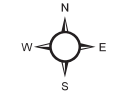


Exhibit 4.9-1



Sevaine Creek join Etiwanda Creek, which runs southerly and connects to the Santa Ana River east of the Interstate 15 (I-15) Freeway (Santa Ana RWQCB 2008).

Storm Drainage

The City's storm drainage and flood control system provides both regional and local drainage, and provides debris basins and spreading grounds designed to reduce mud flows. Storm drainage in the City is provided by curbs and gutter along streets, which direct storm water into catch basins, pipes, and concrete channels that run southerly in or near the City. The City maintains 104 miles of storm drains and 2,200 drainage structures within its storm drainage system (Rancho Cucamonga 2010a). These facilities connect to the regional storm drainage system owned and maintained by the San Bernardino County Department of Public Works, which includes channelized creeks, debris basins, and spreading grounds. Together, the City and the San Bernardino County Department of Public Works prepare drainage plans and review development projects using the County's design criteria (Rancho Cucamonga 2009b).

Groundwater

The City of Rancho Cucamonga is underlain by the Chino and Cucamonga groundwater basins, with the Cucamonga basin underlying the area located generally north of the Red Hill inferred fault and the Chino basin underlying the area south of the fault. The Red Hill Fault acts as a hydrological barrier between the two groundwater basins. Exhibit 4.9-2, Groundwater Basins, shows the boundaries of the Chino and Cucamonga Basins (Chino Basin Watermaster 2005a).

The Chino Groundwater Basin is located under approximately 235 square miles of the upper Santa Ana River Watershed, and is bound by the Red Hill Fault, the San Gabriel Mountains, and the Cucamonga Basin to the north; the Rialto-Colton Fault to the northeast; the groundwater divide to the Rialto-Colton Basin to the east; Jurupa Hills, Pedley Hills, and the Riverside Narrows to the southeast; La Sierra Hills and the Temescal Basin to the south; Chino Hills and Puente Hills to the southwest; the groundwater divide to the Pomona and Claremont Groundwater Basins to the west; and the San Jose Fault to the northwest (Chino Basin Watermaster 2005a).

The Chino Groundwater Basin underlies an alluvial valley that slopes from the north to the south at a one to two percent grade. Data from the Chino Basin Watermaster indicates that groundwater depths in the Chino Basin in the City range from 350 to 600 feet below the ground surface, with deeper groundwater levels at the northern section and shallower groundwater levels at the southern section (Chino Basin Watermaster 2007b).

Water sources in the Chino Basin include water flow infiltration within unlined stream channels overlying the Basin; infiltration of storm water and municipal wastewater discharges within the Santa Ana River channel; underflow from the saturated sediments and fractures within the nearby mountains and hills; artificial recharge at storm water spreading grounds; imported water; recycled water; underflow from seepage across the Red Hill Fault (from the Cucamonga Basin), the San Jose Fault (from the Claremont Heights and Pomona basins), and the Rialto-Colton Fault (from the Rialto-Colton Basin); intermittent underflow from the Temescal Basin; and percolation of rainfall and returns from irrigation use (Chino Basin Watermaster 2005a).

An average of approximately 154,000 acre-feet/year of water was pumped from this basin between 1985 and 2005 (MWD 2007). In 2006/2007, approximately 171,491 acre-feet was pumped from the basin. In 2007/2008, 137,427 acre-feet was pumped from the basin (Chino Basin Watermaster 2008). Amounts in excess of the safe yield were accompanied by basin recharge with imported water and recycled water.

The estimated total basin storage is about 6 million acre-feet, with 5 million acre-feet of water in storage and about 1 million acre-feet of unused storage space. Approximately 500,000 acre-feet of unused storage space is available (MWD 2007).

The Cucamonga Basin is bound on the north by the San Gabriel Mountains and the Cucamonga fault, and on the west, south, and east by the Red Hill fault. The Red Hill Fault also serves as the groundwater barrier between the Chino and Cucamonga groundwater basins, with groundwater 225 to 375 feet higher on the northern side of the fault. The aquifer is over 1,600 feet deep and consists of unconfined older and younger alluvium. Storage capacity is estimated at 53,600 acre-feet. Groundwater levels in this basin were approximately at 1,350 feet above mean sea level (msl) in 1985, declining to 1,225 feet above msl in 2004 (MWD 2007).

Water in the Cucamonga Basin comes from infiltration of stream flow, percolation of rainfall, underflow from the San Gabriel Mountains, and return irrigation flow. Spreading grounds along Cucamonga Creek and at the Alta Loma basins also contribute to basin recharge. An estimated safe yield of 13,800 to 22,220 acre-feet/year is present in this basin. An average of approximately 14,500 acre-feet/year of water was pumped from this basin between 2000 and 2004 (MWD 2007).

The Groundwater Assessment Study by the Metropolitan Water District of Southern California (MWD) estimates the available groundwater storage within the Cucamonga and Chino Basins at 439,000 acre-feet in 2006 (MWD 2007).

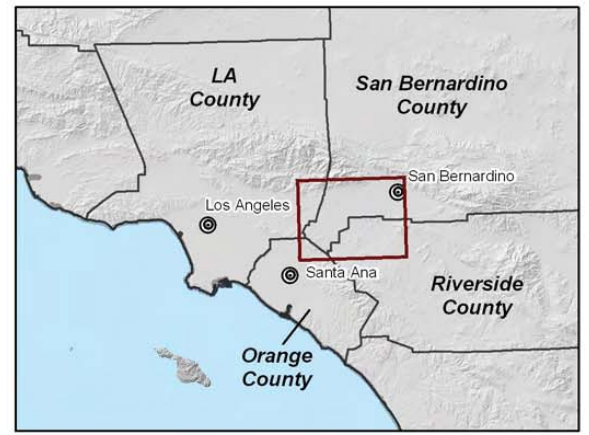
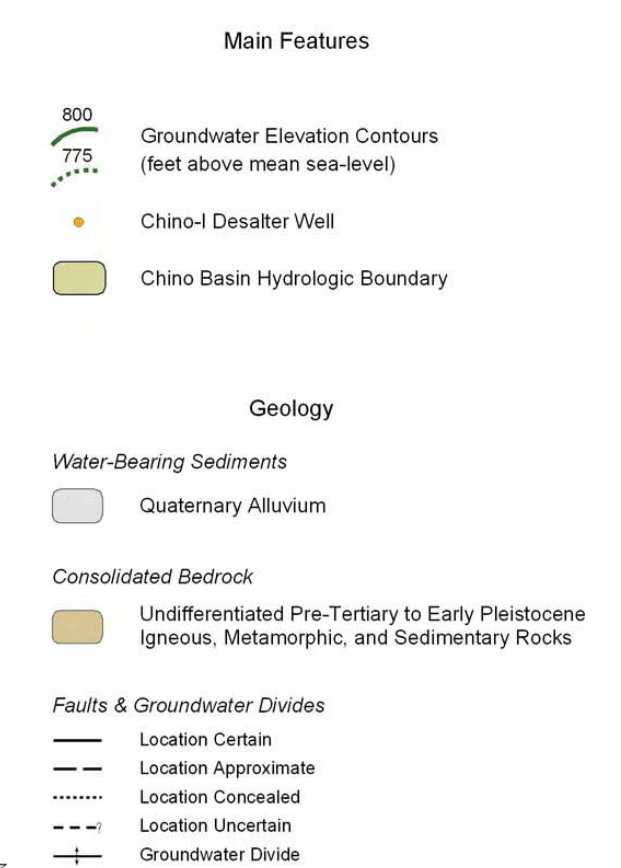
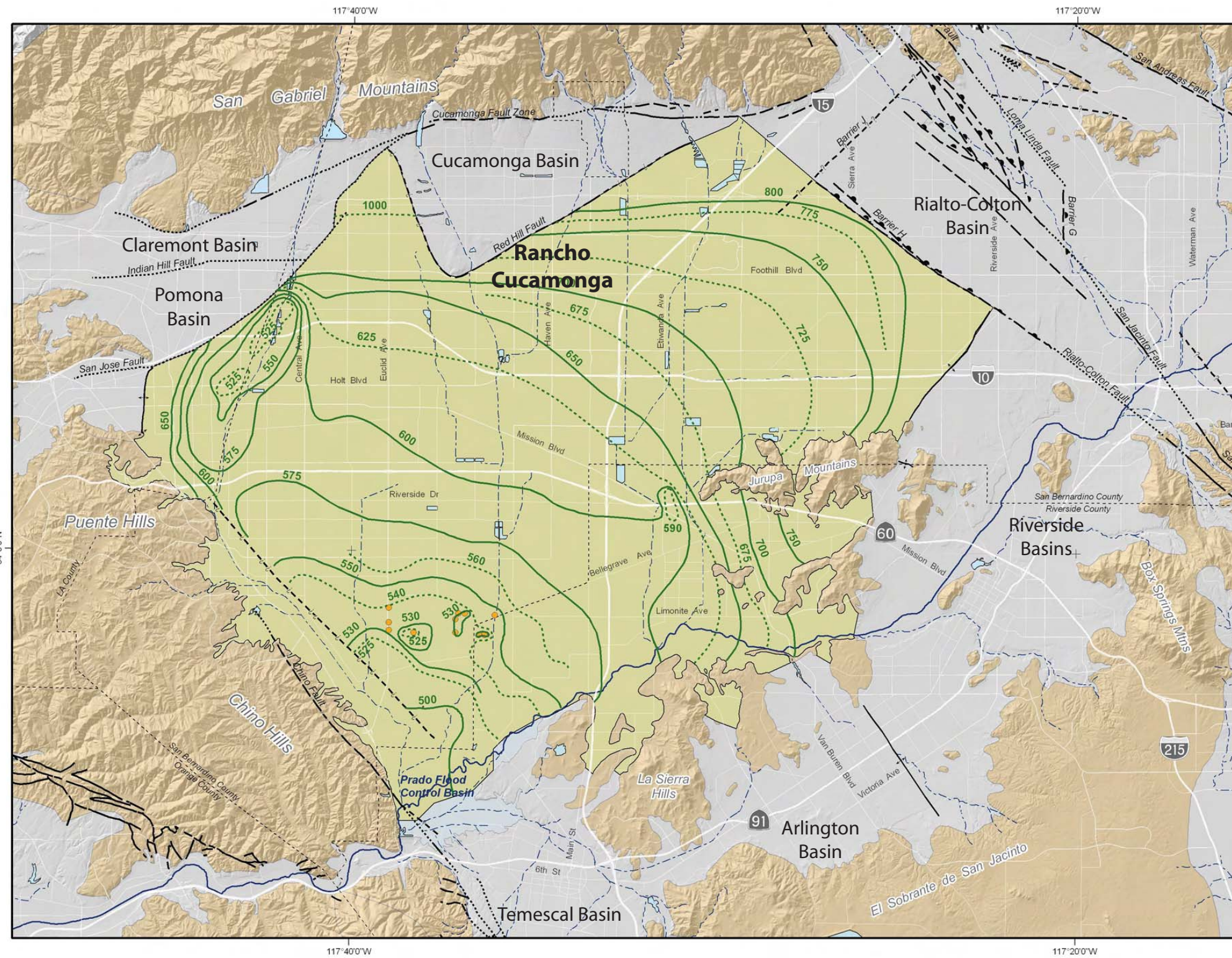
The Cucamonga Valley Water District (CVWD) provides water to the entire City of Rancho Cucamonga; the SOI area; and portions of the cities of Fontana, Ontario, and Upland. The majority of CVWD's water comes from three main sources: imported water from the MWD, the Chino and Cucamonga Basins groundwater, and local canyon runoff (CVWD 2003).

Water Quality

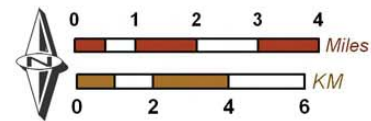
Surface Water Quality

Storm waters within Rancho Cucamonga are discharged into Day Creek, Deer Creek, East Etiwanda Creek, Cucamonga Creek, Mill Creek, Chino Creek, and the Santa Ana River and the Prado Basin along the river. The following are beneficial uses of these receiving waters:

- ***Municipal and Domestic Supply (MUN):*** Used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- ***Agricultural Supply (AGR):*** Used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- ***Industrial Process Supply (PROC):*** Used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, processing water supply and all uses of water related to product manufacture or food preparation.
- ***Groundwater Recharge (GWR):*** Used for natural or artificial groundwater recharge for purposes that may include, but are not limited to, future extraction, water quality maintenance, or halting of saltwater intrusion into freshwater aquifers.



Source: Chino Basin Watermaster 2004



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Groundwater Basins

Rancho Cucamonga General Plan Update



Exhibit 4.9-2



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- **Water Contact Recreation (REC 1*):** Used for recreational activities involving bodily contact with water and where ingestion is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
- **Non-contact Water Recreation (REC 2*):** Used for recreational activities involving proximity to water, but not normally involving bodily contact with water and where ingestion would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the aforementioned activities.
- **Warm Freshwater Habitat (WARM):** Used to support warm water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, and fish and wildlife, including invertebrates.
- **Limited Warm Freshwater Habitat (LWRM):** Used to support warm water ecosystems that are severely limited in diversity and abundance as the result of concrete-lined watercourses and low, shallow, dry weather flows, which result in extreme temperature, pH, and/or dissolved oxygen conditions. Naturally reproducing finfish populations are not expected to occur in LWRM waters.
- **Cold Freshwater Habitat (COLD):** Used to support coldwater ecosystems that may include, but are not limited to, preservations and enhancement of aquatic habitats, vegetation, and fish and wildlife, including invertebrates.
- **Wildlife Habitat (WILD):** Used to support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
- **Rare, Threatened, or Endangered Species (RARE):** Used to support the habitats necessary for the survival and successful maintenance of plant or animal species designated under State or Federal law as Rare, Threatened, or Endangered.
- **Spawning, Reproduction, and Development (SPWN):** Used to support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.

The existing, potential, and intermittent beneficial uses for each water body in and downstream of Rancho Cucamonga are listed in Table 4.9-1.

**TABLE 4.9-1
BENEFICIAL USES OF RECEIVING WATERS**

Water Body	Beneficial Uses											
	MUN	PROC	AGR	GWR	REC1	REC2	WARM	LWARM	COLD	WILD	RARE	SPWN
Day Creek	X	X	-	X	X	X	-		X	X	-	-
East Etiwanda Creek	X	X	-	X	X	X	-		X	X	X	-
Reach 1 of Cucamonga Creek	-	-	-	X	X*	X	-	X	-	X	-	-
Deer Creek	I	-	-	I	I	I	-		I	I	-	-
Reach 3 of Upper Santa Ana River	-	-	X	X	X	X	X		-	X	X	X
Mill Creek (Prado Area)	-	-	-	-	X	X	X	-	-	X	X	-
Reach 1 of Chino Creek	-	-	-	-	X	X	X	-	-	X	X	-
Prado Basin Mgt Zone	-	-	-	-	X	X	X			X	X	

X – Present and Potential Beneficial Use
I – Intermittent Beneficial Use
* - Access prohibited in some portions by the San Bernardino County Flood Control District
Source: Santa Ana RWQCB 2008.

Water quality objectives for algae, ammonia, coliform bacteria, boron, chemical oxygen demand, chloride, chlorine, color, total dissolved solids, fluoride, hardness, metals, methylene blue-activated substances, nitrate, oil and grease, dissolved oxygen, percent hydrogen (pH), radioactivity, sodium, suspended solids, sulfates, sulfide, surfactants, taste and odor, temperature, toxic substances, and turbidity are also included for surface waters in the Basin Plan. In addition, water quality objectives for arsenic, coliform bacteria, barium, boron, chloride, color, cyanide, total dissolved solids, fluoride, hardness, metals, methylene blue-activated substances, nitrate, oil and grease, pH, radioactivity, sodium, sulfates, taste and odor, and toxic substances in groundwater are also provided.

Water bodies that do not meet water quality standards are deemed “impaired” and, under Section 303(d) of the CWA, are placed on a list of impaired waters for which a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (with a “factor of safety”). Once established, the TMDL is allocated among current and future pollutant sources to the water body.

Runoff from properties in the 2010 General Plan Update Study Area flows into Day Creek, Deer Creek, East Etiwanda Creek, Cucamonga Creek, Chino Creek, Mill Creek, and eventually into the Santa Ana River and the Prado Dam and Basin at Prado Park. Prado Park Lake is listed as impaired due to nutrients from non-point sources, with the TMDL to be adopted by 2019. Mill Creek (in the Prado Area) is also listed as impaired due to high levels of nutrients and suspended solids from agricultural uses and dairies, with the TMDL to be adopted by 2019 (USEPA 2007a).

As part of a current update, Reach 1 of Cucamonga Creek is proposed for listing due to high levels of pH (the measure of acidity) and copper, with the TMDL to be adopted by 2021. Reach

3 of the Santa Ana River is also proposed for listing due to high levels of iron and copper, with the TMDL to be adopted by 2021 (Santa Ana RWQCB 2009b).

While the impairment of Prado Park Lake, Mill Creek, Reach 3 of the Santa Ana River, and Reach 1 of the Cucamonga Creek are not entirely attributable to pollutants and land uses in Rancho Cucamonga, discharges from the City are subject to the discharge limitations of established TMDLs.

Groundwater Quality

All public water supplies in California must meet both State and Federal regulations for water quality. State-mandated standards are enforced by the California Department of Health Services. Federal regulations for water quality are mandated by the Safe Drinking Water Act of 1974. Standards and monitoring requirements have been set by the USEPA.

An annual Water Quality Report is prepared by the CVWD, which provides water to the City and conducts regular testing for 31 Federally and State-regulated constituents. According to the 2008 Water Quality Report, the CVWD's water supply met all applicable standards.

A salt imbalance present in the Chino Groundwater Basin has been remedied by desalters and the Santa Ana River Interceptor (SARI) Brine Line. Total dissolved solids (TDS) and nitrate concentrations have also been found in high levels within the Chino Groundwater Basin due to agricultural and dairy operations (Santa Ana RWQCB 2008). TDS levels range from 250 to 500 milligrams per liter (mg/L) in the areas south of the Interstate 60 (I-60) Freeway, with some areas having TDS levels greater than 2,000 mg/L. The Maximum Contaminant Level (MCL) for TDS is 500 mg/L. Nitrate concentrations also increase from north to south, with levels south of the I-60 Freeway exceeding 40 mg/L. The MCL for nitrate concentrations is 10 mg/L. Volatile organic compounds (VOCs) are generally below detection limits, with isolated pockets exceeding the MCL (MWD 2007). Plumes of VOCs and perchlorate have been found in the Chino Groundwater Basin, but these are not located in the portions of the basin that underline the City of Rancho Cucamonga (SAWPA 2009).

TDS levels in the Cucamonga Basin range from 163 to 446 mg/L, with an average of 250 mg/L. The average ambient nitrate level in the Cucamonga Basin is approximately 4.3 mg/L. No VOCs have been detected in this basin, and perchlorate levels are below the MCL. However, declining water levels have led to decreased pumping in the Cucamonga Basin (MWD 2007).

Flood Hazards

Rancho Cucamonga has a history of flooding. In 1969, storms in January and February caused extensive flooding in San Bernardino County and six neighboring counties, leading to these areas being declared national disaster areas. Damage to a flood levee structure in the Cucamonga Spreading Grounds caused Cucamonga Creek to breach its channel and resulted in extensive flooding in the City. In 1977, flooding and street damage on Vineyard Avenue, Hellman Avenue, and the surrounding areas occurred due to intense rainfall. In 1983, Alta Loma High School was damaged, homes were flooded, and street wash-outs and cave-ins occurred during the initial hours of the storm (Rancho Cucamonga 2004).

Legislated through Assembly Bill (AB) 162, General Plan Land Use Elements must identify areas that are subject to flooding, as identified by FEMA or DWR floodplain mapping, and an annual review of the flood-prone area(s) must be conducted. FEMA's FIRMs (2008) indicate areas in the City that are subject to 100-year and 500-year floods (see Exhibit 4.9-3, Flood Hazard Zones). These include areas on the Cucamonga Creek Channel, Demens Creek

Channel, Etiwanda Creek Channel, upper Day Creek, and other scattered sites throughout the City (FEMA 2008).

The drainage system in Rancho Cucamonga has been substantially improved in recent decades and contains an integrated approach that addresses regional and local drainage flows. The completion of the Hillside Storm Drain, Deer Creek Channel, and Demens Creek Channel has reduced the extent of potential flooding within the City. Recent improvements—including the Upper and Lower Hermosa Storm Drain projects, the Archibald Storm Drain project, the Day Creek project, and the Etiwanda/San Sevaine Flood Control project—have further reduced flooding potential in the City (Rancho Cucamonga 2001a).

The San Bernardino County Department of Public Works has constructed regional flood and debris control facilities throughout the County, including flood control channels in Rancho Cucamonga that direct runoff through the City into regional facilities. A system of spreading basins along major creeks has also been constructed to manage storm water runoff and to help recharge local groundwater basins. These include the Cucamonga Creek Debris Basin, Deer Canyon Debris Basin, Day Creek Debris Basin, Alta Loma Basins, Etiwanda Creek Debris Basin, Demens Creek Debris Basin, and San Sevaine Debris Basin. Levees along the creeks have also reduced flood hazards (Eke 2009).

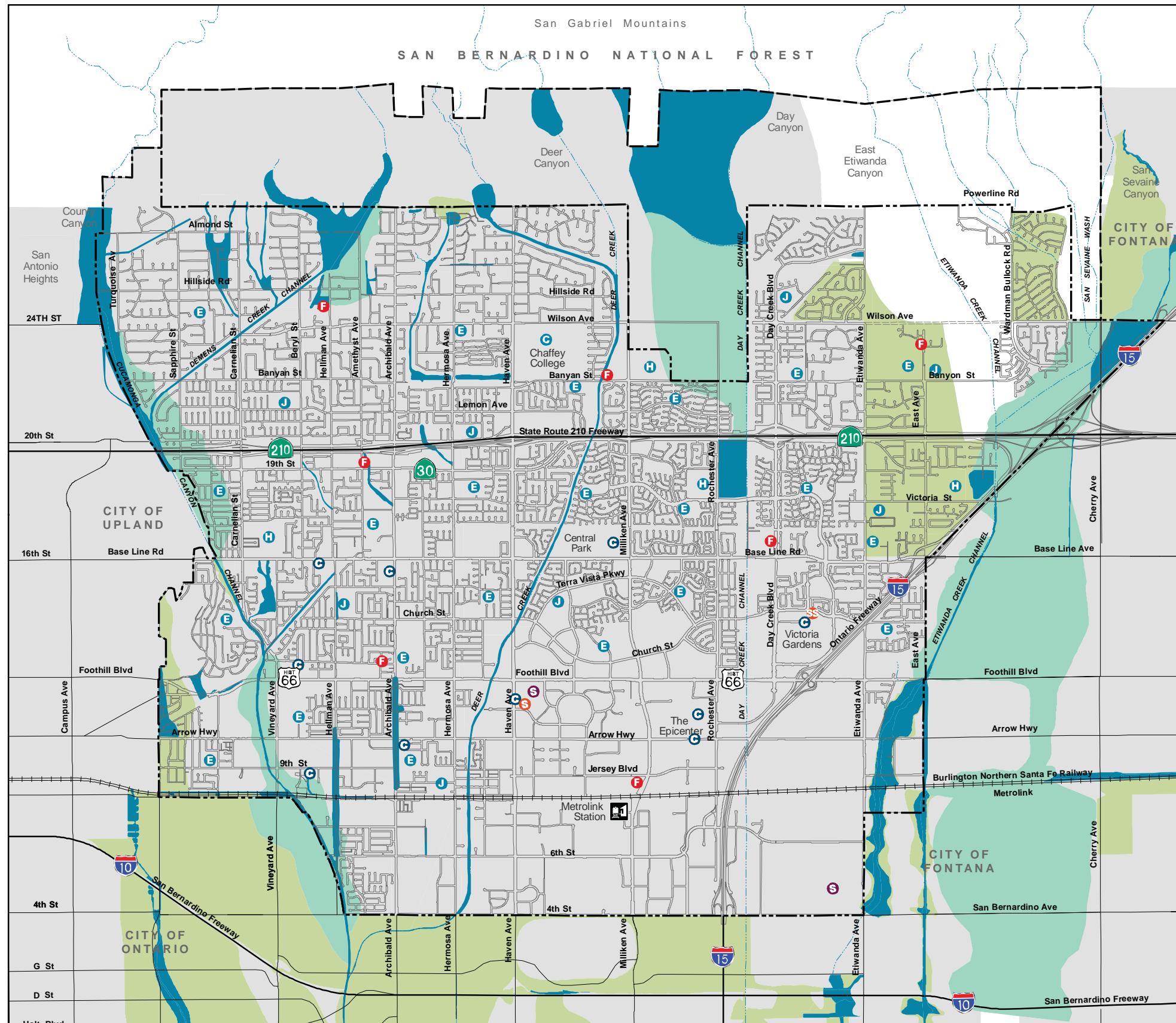
Two areas within the City are known to have deficient drainage facilities: the undeveloped portions of the City that have no flood control improvements and certain areas within the Industrial Specific Plan that require additional detention facilities. The drainage facilities for the industrial property located generally north and south of the Metrolink railroad tracks between Haven Avenue and Rochester Avenue were designed and constructed using San Bernardino County Flood Control criteria in effect during the early 1980s. New development within this area may require the addition of detention facilities on a case by case basis to provide 100-year flood protection for the structures on these properties (James 2010).

Dam Inundation

Dam failure due to an earthquake, erosion, design flaw, or water overflow during storms can cause inundation hazards in the City. The San Antonio Dam in the City of Upland is located west of the City of Rancho Cucamonga, and dam failure may result in inundation hazards in the City. Failure of debris basin slopes may also lead to inundation of downstream areas. The potential inundation areas in and near the City are shown in Exhibit 4.9-4, Dam Inundation Areas. These include areas downstream of debris basins and a small portion of the southwestern section of the City that could be affected by a breach of the San Antonio Dam in Upland (USACE 1986).

The Emergency Action and Notification Subplan for the San Antonio Dam has been prepared by the USACE. The subplan identifies (1) actions that determine when emergency operations are necessary; (2) actions during extreme inflow conditions and after earthquakes; (3) available resources and assistance; (4) notification lists; (5) inundation maps; and (6) the emergency response team.

Inundation studies based on failures of the CVWD's water tanks indicate that 4 of the projected reservoir failures will impact land that is currently vacant; 3 are expected to inundate 1 or 2 structures; and 1 reservoir site may inundate as many as 15 residences. State law requires the City to have emergency procedures in place for the evacuation and control of populated areas located within inundation limits below the dams. In addition, real estate disclosure upon sale or transfer of property in the inundation area is required (Rancho Cucamonga 2001a).



- Flood Hazard Zones**
- Special Hazard Area (100-year Floodplain)
 - 1% Annual Chance of Flood Hazard Area
 - Moderate Hazard Area (500-year Floodplain)
 - 0.2% Annual Chance of Flood Hazard Area
 - Protected by Levee
 - Minimum Hazard Area (500-year Floodplain)
 - Area Outside of 0.2% Annual Chance of Flood Hazard

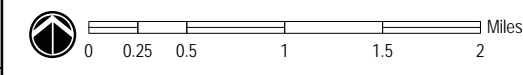
- Base Map**
- Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways

- Critical Facilities**
- E Elementary School
 - J Junior High/Middle School
 - H High School
 - C College
 - F Fire Station
 - S Sheriff's Station
 - SS Sheriff's Sub-Station
 - SG San Bernardino Government Facilities
 - City Facilities

Note: The National Flood Hazard Layer (NFHL) data used to create this map incorporates all Digital Flood Insurance Rate Map (DFIRM) databases published by FEMA, and any Letters Of Map Revisions (LOMRs) that have been issued against those databases since their publication date. The published effective Flood Insurance Rate Map (FIRM) and DFIRM maps are issued as the official designation of the Special Flood Hazard Areas (SFHAs).

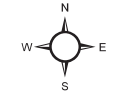
For official FIRM visit FEMA's Website: <http://msc.fema.gov>

Source: City of Rancho Cucamonga, 2008 and Federal Emergency Management Agency, DFIRM published August 28, 2008.

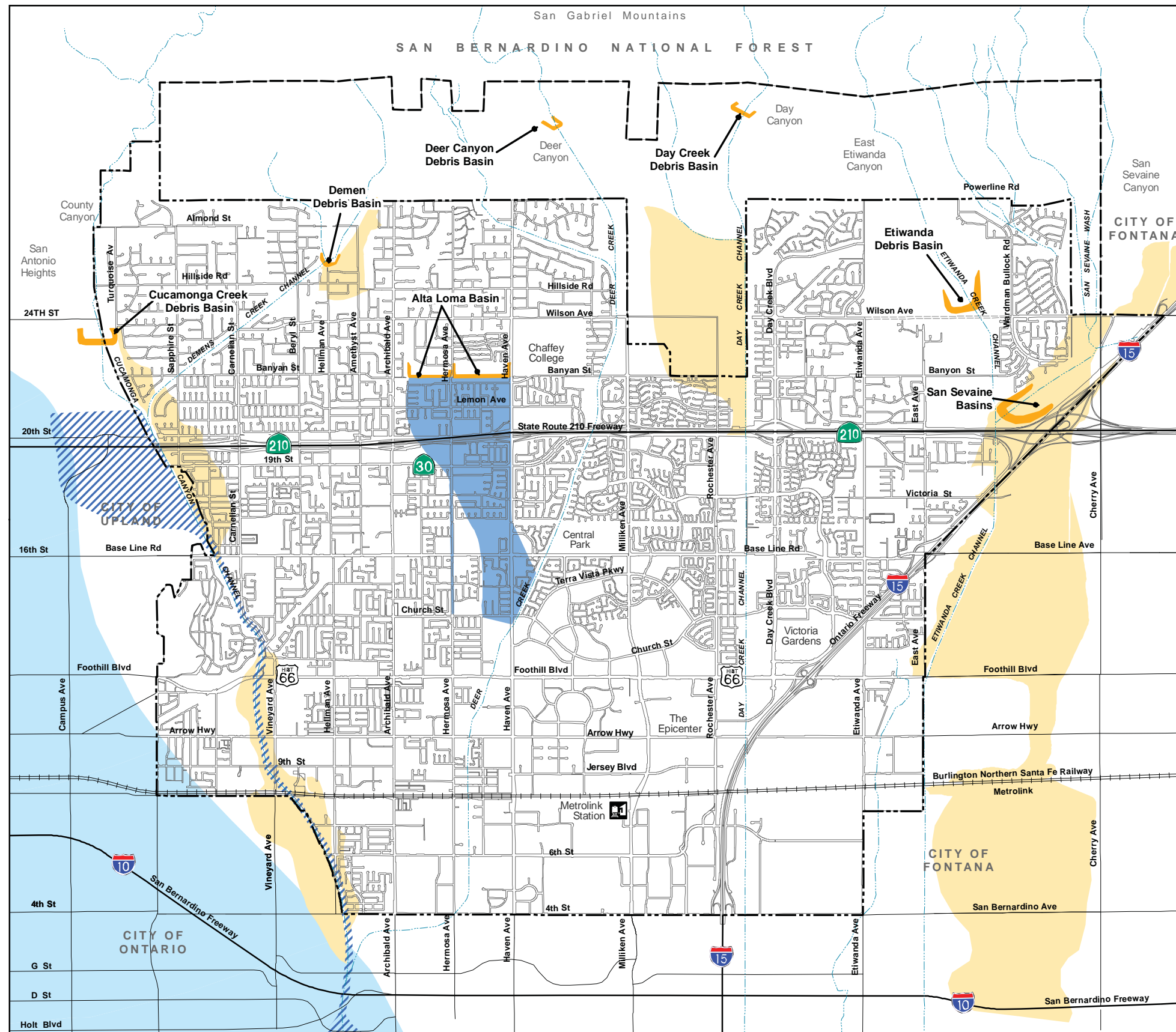


Flood Hazard Zones
Rancho Cucamonga General Plan Update

Exhibit 4.9-3



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- Inundation Areas**
- Dams/Catch Basins
 - Alta Loma Basin Inundation Area
 - Cucamonga Creek Inundation Area
 - 500-year Flood Zone Area Protected by Levee
 - San Antonio Dam Inundation Area

- Rancho Cucamonga City Boundary
- Sphere of Influence
- Waterways

Source: Rancho Cucamonga, 2001 and San Bernardino County Assessor, 2009.



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Dam Inundation Hazards

Rancho Cucamonga General Plan Update

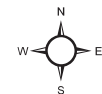


Exhibit 4.9-4



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Tsunami and Seiche

Tsunami (sea waves) are not a hazard for the City of Rancho Cucamonga due to the City's elevation and distance from the ocean.

A seiche is the formation of large waves in landlocked bodies of water due to seismic activity. In the event of an earthquake, a seiche can occur and potentially cause major flooding and water inundation damage. There are no large open water bodies in Rancho Cucamonga outside of the dams and reservoirs discussed above.

4.9.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The proposed 2010 General Plan Update would result in a significant adverse impact related to hydrology and water quality if it would:

- Threshold 4.9a:** Violate any water quality standards or waste discharge requirements;
- Threshold 4.9b:** Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Threshold 4.9c:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Threshold 4.9d:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river;
- Threshold 4.9e:** Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Threshold 4.9f:** Otherwise substantially degrade water quality;
- Threshold 4.9g:** Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Threshold 4.9h:** Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Threshold 4.9i:** Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam;
- Threshold 4.9j:** Result in inundation by seiche, tsunami, or mudflow; and/or

Threshold 4.9k: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4.9.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address hydrology, water quality, and flooding in the City. Implementation of these goals and policies and their corresponding implementation actions would reduce impacts on hydrology and water quality from future development and redevelopment. These include:

Policy LU-3.4: Promote development that is sustainable in its use of land and that limits impacts to natural resources, energy, and air and water quality.

Implementation Action: *Adopt a sustainable development program that incorporates green building standards.*

GOAL RC-2: Provide adequate, reliable, and sustainable water supplies to the community.

Policy RC-2.1: In consultation with the Cucamonga Valley Water District and other agencies, designate appropriate land use patterns and take other suitable actions to protect major areas within the Planning Area that are critical to replenishment of groundwater supplies and local surface waters.

Implementation Action: *Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge.*

Policy RC-2.2: Continue to consult with the Cucamonga Valley Water District and support programs that protect water quality, conserve water usage, and promote re-use of water in accordance with State guidelines.

Implementation Action: *Continue to consult with the CVWD on meeting targets for water recycling and conservation.*

Policy RC-2.4: Promote the protection of natural stream courses from erosion and from polluted urban runoff.

Implementation Action: *Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit.*

Policy RC-2.6: Where it is consistent with public safety priorities, take actions to retain natural drainage courses within the Planning Area.

Implementation Action: *Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit.*

Policy RC-2.7: Protect the watershed by achieving mandates imposed by regulations.

Implementation Action: Continue to coordinate information and regulations between the multi-agency and multi-jurisdictions sharing the collective watershed.

GOAL PS-7: Provide adequate and appropriately designed storm drainage and flood control facilities to minimize the risk of flooding.

Policy PS-7.1: Continue to upgrade and expand the flood control system so that the community is protected from flooding.

Implementation Action: Consult with the County Flood Control District to ensure regional facilities are appropriately maintained. Continue to inventory any deficiencies in the City's flood control system and implement required improvements through the CIP or other methods that may expedite improvements.

Policy PS-7.2: Continue to maintain and improve the City's flood control system and upstream tributary areas.

Implementation Action: Continue to collect flood control fees as part of the development permitting process, and continue to participate in the regional Zone 1A Advisory Committee meetings.

Policy PS-7.3: Provide input on the level of development intensity and conservation practices within the City's Sphere of Influence area and the San Bernardino National Forest.

Implementation Action: Continue to review plans and programs and provide City input to the County of San Bernardino and National Forest Service concerning areas in the City's Sphere. For development projects within the Sphere, insist upon application of City development standards and review practices in lieu of those of the county.

Policy PS-7.4: Maintain structural and operational integrity of essential public facilities in the event of a flooding hazard, and locate new essential public facilities outside of flood hazard zones.

Implementation Action: Continue to locate essential public facilities in protected areas outside of recognized flood zones.

Policy PF-5.2: Support the efforts of the CVWD and San Bernardino County agencies to provide and expand water treatment facilities to treat local water sources from canyon surface waters and groundwater.

Implementation Action: Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge. Continue to consult with the CVWD on meeting targets for water recycling and conservation. Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit. Provide CVWD with requested population projections and other information that will inform regular updates of CVWD's Urban Water Management Plan. Continue to coordinate information and regulations between the multi-agency and multi-jurisdictions sharing the collective watershed.

Policy PF-6.1: Continue to ensure an adequate treatment and collection system capacity for Rancho Cucamonga's wastewater that is conveyed to the Inland Empire Utilities Agency water reclamation facilities, while protecting water quality and public health and minimizing adverse impacts to the environment.

Implementation Action: *Consult on the periodic analysis by the CVWD and other responsible agencies to ensure that operating levels remain the same. For major development projects, require capacity assessments of both transmission and treatment facilities.*

4.9.5 STANDARD CONDITIONS OF APPROVAL

There are existing Federal, State, and regional regulations that relate to hydrology and water quality issues. Compliance with these regulations would be required for all new development and redevelopment in the City. These include the standard conditions of approval (SCs) listed below.

- SC 4.9-1** Chapter 19.20 of the Rancho Cucamonga Municipal Code is the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance, which provides regulations to comply with the CWA, the California Water Quality Control Act, and the City's NPDES permit. This ordinance prohibits the discharge of specific pollutants into the storm water; regulates connections to the storm drain system; and requires development projects to implement permanent BMPs on individual sites to reduce pollutants in the storm water.
- SC 4.9-2** The Santa Ana RWQCB implements the Water Quality Control Plan for the Santa Ana River Basin through the through issuance of individual WDRs; discharge prohibitions; water quality certifications; programs for salt management, non-point sources, and storm water; and monitoring and regulatory enforcement actions, as necessary. Individual developments are required to obtain water quality certifications and/or WDRs and comply with the discharge prohibitions, TMDLs, and various programs of the Board.
- SC 4.9-3** In compliance with the terms of the adjudications for the Chino and Cucamonga Groundwater Basins, the CVWD and other participating entities shall pump groundwater according to their prescriptive water rights as managed by the Chino Basin Watermaster.
- SC 4.9-4** The City's Floodplain Management Regulations (Chapter 19.12 of the Rancho Cucamonga Municipal Code) require all structures and land uses within the designated floodplains to be reasonably safe from flooding and not increase the base flood by more than one foot where base flood elevations have been determined but a floodway has not been designated. This is accomplished by the implementation of flood hazard reduction measures, which would include anchoring; flood-resistant materials; drainage around structures; elevation of lowest floor above base flood elevation; floodproofing; elimination of infiltration of floodwater or discharges from water and sewer lines; prohibition of floodway encroachment; and mobile home and recreational vehicle standards.
- SC 4.9-5** Storm drainage system improvements in the City are constructed in accordance with the Master Plan of Drainage-Westside Area and the Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage. These drainage master plans address the flood control needs of a fully

developed drainage area and identify the regional and local facilities needed to adequately convey a 100-year storm event. Storm drainage system improvements in other areas of the City are constructed in accordance with the storm drain plan in the applicable Specific Plan or Community Plan. Buildout of the proposed 2010 General Plan Update shall comply with the applicable drainage master plans.

- SC 4.9-6** The Santa Ana River Mainstream Project will provide increased flood protection to the communities within Orange, San Bernardino and Riverside Counties by constructing structural improvements at dams, levees, creeks, street drains, and the Santa Ana River; restoring marshland; and protecting canyon areas. Implementation of this project is being coordinated between the flood control districts of the three counties (as local sponsors) and the USACE. The City of Rancho Cucamonga shall continue coordination and cooperation with the USACE and local sponsors for the ongoing implementation of this project.
- SC 4.9-7** A final drainage study shall be submitted to and approved by the City Engineer prior to final map approval or the issuance of building permits, whichever occurs first. All drainage facilities shall be installed as required by the City Engineer.
- SC 4.9-8** Adequate provisions shall be made for acceptance and disposal of surface drainage entering the property from adjacent areas.
- SC 4.9-9** The San Bernardino County Department of Public Works owns and maintains the channelized creeks, debris basins, levees, and spreading grounds located in and north of the City, which reduce storm water flows in canyons and flood hazards. Buildout of the proposed 2010 General Plan Update shall be subject to the County's ongoing maintenance of debris basins, channels, and spreading grounds reduces hazards associated with flooding, mudflow, and debris flows from the mountains (Eke 2009).
- SC 4.9-10** The proposed 2010 General Plan Update shall comply with requirements set forth by the USACE in the Emergency Action and Notification Subplan for the San Antonio Dam, which identifies actions and responsibilities for warning, evacuation, and post-disaster recovery that will be followed in the event of dam failure.

4.9.6 ENVIRONMENTAL IMPACTS

Water Quality and Waste Discharge Standards

Threshold 4.9a: Would the proposed General Plan Update violate any water quality standards or waste discharge requirements?

Construction Impacts

Storm water runoff from individual construction sites could contain pollutants such as soils and sediments that are released during grading and excavation activities and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that may result from construction activities may include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

The storm water runoff flows into the storm drain inlets in the City or in the surrounding area and would enter into the Cucamonga Creek, Day Creek, Deer Creek, Etiwanda Creek or San Sevaine Creek, which are connected to the Santa Ana River, Prado Dam, and Mill Creek. Segments of the Cucamonga Creek, Santa Ana River, Prado Park Lake, and Mill Creek are considered to be impaired water bodies, and pollutants in the storm water could further degrade water quality and violate TMDLs in these water courses/water bodies.

The CWA establishes a framework for regulating potential water quality impacts from construction activities through the NPDES program. Construction activities that disturb one acre or more of land are required to obtain an NPDES permit from the SWRCB, Division of Water Quality. An SWPPP is required for a project to be covered under the Construction General NPDES permit and must include BMPs to reduce water quality impacts. These BMPs include various measures to control on-site erosion; reduce sediment flows into the storm water; control wind erosion; track soil and debris into adjacent roadways and off-site areas; and manage wastes, materials, wastewater, liquids, hazardous materials, stockpiles, equipment, and other site conditions in order to prevent pollutants from entering the storm drain system. Inspections, reporting, and storm water sampling and analysis are also required to ensure that visible and non-visible pollutants are not discharged off site.

According to MMs 4.9-1 and 4.9-2, individual property owners/developers of future development and redevelopment pursuant to the proposed 2010 General Plan Update shall be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction Activities (NPDES No. CAS000002, Order No 2009-0009-DWQ). Compliance with the NPDES permit would reduce short-term, construction-related storm water quality impacts to Cucamonga Creek, the Santa Ana River, Prado Park Lake, and Mill Creek. Impacts would be reduced to less than significant; no mitigation is required.

Operational Impacts

Potential pollutants that could be generated by the occupancy/operation of future development and redevelopment pursuant to the 2010 General Plan Update could include, but are not limited to, bacteria/viruses, heavy metals, nutrients, pesticides, organic compounds, sediments, trash and debris, oxygen demanding substances, and oil and grease. Specific pollutants would depend on the type of land use and the site improvements proposed by individual projects; basically, residential developments, industrial or commercial developments, automotive repair shops, restaurants, hillside developments, parking lots, and streets would have the potential to generate different storm water pollutants.

Implementation of MM 4.9-3 calls for new development and major redevelopment projects to prepare individual WQMPs that identify (1) the potential pollutants of concern that would be generated by the project and (2) the site and hydrologic conditions of concern at downstream locations. The WQMP would identify permanent site design, source control, and treatment control BMPs that would be implemented as part of the project, including maintenance responsibilities and funding sources, and would be signed as a notarized agreement between the City and the property owner to provide a long-term commitment to its implementation. Preparation and implementation of a WQMP for new development and redevelopment projects satisfies MS4 Permit requirements and allows the City comply with the water quality standards for storm water runoff.

As stated in SC 4.9-1, the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance prohibits the discharge of specific pollutants into the storm water and requires development projects to provide BMPs to reduce pollutants in the storm water. Compliance with this ordinance would reduce storm water pollution from individual

developments in the long term. MM 4.9-4 requires that all project developers implement the identified BMPs, thereby reducing impacts to less than significant.

The RWQCB requires industrial projects and land uses that generate storm water or discharges that may directly affect water courses/water bodies to obtain individual WDRs and/or water quality certifications, as provided in SC 4.9-2. Compliance with WDR conditions of approval and water quality certification would prevent the violation of water quality standards.

Policy RC-2.7 of the proposed 2010 General Plan Update recognizes mandates imposed through regulations to protect watersheds. Compliance with NPDES regulations would reduce storm water pollutants generated within the 2010 General Plan Update Study Area.

Impacts would be reduced to a less than significant level.

Impact 4.9a: Future development and redevelopment have the potential to generate pollutants that could enter the storm drainage system and affect water quality at local and regional creeks and the Santa Ana River. Implementation of BMPs in the SWPPP and a WQMP for individual projects (MMs 4.9-1 through 4.9-3), and compliance with pertinent Santa Ana RWQCB regulations (SC 4.9-2), the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance (SC 4.9-1), and Policy RC-2.7 and implementation of MM 4.9-4 would reduce impacts to less than significant levels.

Groundwater

Threshold 4.9b: Would the proposed General Plan Update substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would not lead to a direct withdrawal of groundwater. Construction of future development and redevelopment would also not interfere with groundwater recharge since local spreading grounds in and near the City are designated as Flood Control/Utility Corridor and Conservation areas per the proposed Land Use Plan. Development on other sites in the City would have limited effects on groundwater recharge due to their relatively small sizes and scattered locations.

Groundwater elevations in the City are approximately 300 feet north of the Red Hill Fault and at the southern section of the City, with other areas having groundwater at deeper levels. Excavation and grading activities for future development and redevelopment would not be deep enough (up to 300 feet) to affect the underlying groundwater resources. Thus, future development and redevelopment would not affect the underlying groundwater.

The City of Rancho Cucamonga obtains water services from the CVWD, with approximately 35 percent of the water supplies coming from the underlying Chino and Cucamonga Groundwater Basins. Future development and redevelopment would create a long-term demand for water to be used for domestic purposes, landscape irrigation and maintenance activities. This water demand may lead to an increase in groundwater pumping from local wells.

The Chino Basin Watermaster regulates groundwater pumping for the Chino Groundwater Basin and the Cucamonga Groundwater Basin. The CVWD complies with its pumping rights, as required under SC 4.9-3. Thus, groundwater pumping that may lead to the depletion of local groundwater resources is not expected to occur.

Goal RC-2 in the Resource Conservation Chapter of the proposed 2010 General Plan Update calls for adequate, reliable, and sustainable water supplies to the community. Supporting policies include consultation with the CVWD and other agencies on land use as it relates to the replenishment of groundwater supplies and local surface waters (Policy RC-2.1); support for programs that protect water quality; water conservation; promotion of water reuse in accordance with State guidelines (Policy RC-2.2); protection of natural stream courses from erosion and from polluted urban runoff (Policy RC-2.4); and retention of natural drainage courses within the planning area (Policy RC-2.6).

Implementation of water conservation measures would reduce demand for groundwater resources. Based on the CVWD's Urban Water Management Plan (UWMP), the CVWD's three main sources of water include (1) groundwater; (2) local canyon runoff (surface and subsurface flows); and (3) imported surface water delivered through MWD. In addition, recycled water is a major component of the CVWD's future water supply (CVWD 2005). Available water supplies are expected to be available to meet the water demand of the City to the year 2030. Water supply is further discussed in Section 4.17, Utilities and Service Systems. Indirect impacts on groundwater supplies would be less than significant; no mitigation is required.

Impact 4.9b: Future development and redevelopment would not directly impact local groundwater resources, and the increase in demand for groundwater resources at buildout is not expected to result in significant adverse impacts with implementation of SC 4.9-3, Goal RC-2 and supporting policies, and CVWD water conservation programs. No mitigation is required.

Drainage and Erosion

Threshold 4.9c: Would the proposed General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The City of Rancho Cucamonga is largely developed, with an improved storm drain system of underground lines and concrete-lined creeks. This would not change with the 2010 General Plan Update or future development and redevelopment pursuant to the 2010 General Plan Update. Future development and redevelopment would connect to the existing storm drain system and occur on scattered sites throughout the City. While changes to the local hydrology would occur through the development of vacant lots or the redevelopment of underutilized parcels, this change would be confined to the individual sites and would not affect major underground storm drain lines and channelized creeks in the City. Internal changes in drainage patterns on development sites would not adversely impact regional hydrology or drainage flows in the surrounding area.

With channelized creeks, no alteration in the course of a stream or river is expected. Also, construction activities need to implement erosion control measures under the SWPPP, as required with MM 4.9-1. In addition, the WQMP requirements (MM 4.9-2) require the implementation of on-site BMPs to prevent off-site HCOCs, which include erosion and scour at downstream channels. SC 4.9-4, the City's Floodplain Management Regulations, also includes

standards for development in mudslide-prone areas and erosion-prone areas. Compliance with SC 4.9-4 would prevent erosion hazards on-site and off-site. Additionally, implementation of MM 4.9-5, calling for preparation of an Erosion Control Plan would further reduce potential erosion impacts.

Policy RC-2.4 calls for the protection of natural stream courses from erosion and from polluted urban runoff. Policy RC-2.6 calls for the retention of natural drainage courses if consistent with public safety priorities. Compliance with these policies by future development and redevelopment pursuant to the proposed 2010 General Plan Update would prevent alteration of water courses and substantial erosion.

Adherence to SC 4.9-4 as well as implementation of MMs 4.9-1, 4.9-2, and 4.9-5 would reduce impacts related to erosion and siltation to less than significant levels.

Impact 4.9c: Changes in drainage patterns would be largely confined to individual development sites and no substantial erosion or siltation impacts would be reduced to less than significant levels with adherence to applicable 2001 General Plan Update policies and SC 4.9-4 as well as implementation of MMs 4.9-1, 4.9-2, and 4.9-5.

Drainage Patterns

Threshold 4.9d: Would the proposed General Plan Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river?

As discussed above, changes in drainage patterns would be confined to individual development sites and would not affect underground storm drain lines and channelized creeks in the City or downstream of the City. Increase in runoff volume and velocity would be relatively minor due to the anticipated sizes and locations of sites where future development and redevelopment under the proposed 2010 General Plan Update are expected. Assuming all future development and redevelopment is consistent with the proposed 2010 General Plan Update, impacts would be less than significant and no mitigation would be required.

Impact 4.9d: Less than significant impacts related to the alteration of the course of a stream or river would occur from future development and redevelopment pursuant to the proposed General Plan; no mitigation is required.

Surface Runoff

Threshold 4.9e: Would the proposed General Plan Update substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Threshold 4.9k: Would the proposed General Plan Update require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The amount of impervious surface area in the City would increase as new development and redevelopment introduces structures, driveways, parking lots, walkways, and other site improvements. Thus, runoff volumes are likely to increase over existing conditions. The existing drainage system would need to convey these increased volumes.

As shown in Exhibit 4.9-3, several areas of the City are subject to flooding. Two areas within the City are also known to have deficient drainage facilities. Development within the areas with flood hazards and deficient storm drainage may cause flooding or add to existing flood hazards.

Development in the undeveloped portions of the City that have no flood control improvements would have to provide the necessary infrastructure to accommodate storm drain needs. Also, development within the Industrial Specific Plan may be required to provide on-site detention facilities to prevent flood hazards. This would be required where storm water runoff from a project site within this area would otherwise flow beyond the City's right-of-way and onto private property (James 2010). As stated under SC 4.9-5, continued implementation of the Master Plan of Drainage-Westside Area and the Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage, would fund the improvement of the storm drainage systems in these areas. Storm drainage system improvements in other areas of the City are constructed in accordance with the storm drain plan in the applicable Specific Plan or Community Plan. Compliance with this standard condition would result in the development and/or improvement of the storm drainage systems and prevention of flood hazards. The potential environmental impacts of construction of the necessary storm drain facilities would be assessed on a project-by-project basis as proposed projects pursuant to the 2010 General Plan Update is implemented. The Santa Ana River Mainstream Project (SC 4.9-6) will improve flood protection within the Santa Ana River watershed, which includes the City of Rancho Cucamonga. Additionally, compliance with SCs 4.9-7 and 4.9-8 would require preparation of a final drainage study as well as provisions for surface drainage entering off-site areas.

Goal PS-7 of the proposed 2010 General Plan Update calls for adequate and appropriately designed storm drainage and flood control facilities to minimize flood risk. Supporting policies include upgrade and expansion of the flood control system (Policy PS-7.1) and maintenance of the flood control system and upstream tributary areas (Policy PS-7.2).

In addition, implementation of BMPs to prevent HCOCs, as contained in the individual WQMPs (MM 4.9-4), would decrease off-site flows. Site design, source control, and treatment control BMPs in the WQMPs and in compliance with the City's storm water system regulations (SCs 4.9-1 and 4.9-4) would also reduce pollutants in the runoff that would be conveyed into the creeks serving the City.

Thus, impacts related to flooding or drainage system capacity of water bodies downstream of the site would be reduced to less than significant levels.

Impacts 4.9e Significant impacts from increase in runoff volumes and rates would occur and 4.9k: from future development and redevelopment under the proposed 2010 General Plan Update in terms of flooding or the capacities of downstream drainage systems. Compliance with SCs 4.9-1, 4.9-5, 4.9-6, 4.9-7, 4.9-8, and 4.9-9; with Goal PS-7; and with Policies PS-7.1 and PC-7.2 as well as implementation of MM 4.9-4 would reduce impacts to less than significant levels.

Water Quality

Threshold 4.9f: Would the proposed General Plan Update otherwise substantially degrade water quality?

Future development and redevelopment under the proposed 2010 General Plan Update would generate pollutants that may degrade water quality at downstream surface water bodies.

The western section of the City drains into the Cucamonga Creek, Demens Creek, and Deer Creek at the western section of the City. The eastern section drains into Day Creek, Etiwanda Creek, and San Sevaine Creek. Cucamonga Creek and Etiwanda Creek eventually connect to Chino Creek, Mill Creek, and the Santa Ana River. Under Section 303(d) of the CWA, impaired water bodies in or downstream of the City include Prado Park Lake at the Santa Ana River, Mill Creek, Reach 3 of the Santa Ana River, and Reach 1 of Cucamonga Creek.

Discharges from future development and redevelopment under the proposed 2010 General Plan Update, if unmitigated, would contribute to the continued impairment of these water bodies/water courses.

The Santa Ana RWQCB's *Water Quality Control Plan for the Santa Ana River Basin* (Basin Plan) contains water quality standards for water resources in the region and an implementation plan to maintain these standards. The Basin Plan discusses existing water quality, beneficial uses of ground and surface waters, and local water quality conditions and problems. The Basin Plan also sets water quality goals and TMDLs that are used as a basis for the basin's regulatory programs. Compliance with Santa Ana RWQCB regulations (SC 4.9-2) would prevent the discharge of pollutants into receiving waters that are considered "impaired."

Also, the City's NPDES permit requires that future development and major redevelopment projects prepare and implement a WQMP, which would identify site design, source control, and treatment control BMPs that would effectively prohibit non-storm water discharges from entering into the storm drain system (MMs 4.9-3 and 4.9-4). This would ensure that no conflict with the *Water Quality Control Plan for the Santa Ana River Basin* would occur with future development and redevelopment. Implementation of BMPs in the SWPPP for future development and redevelopment projects on sites of 1 acre or more would also reduce storm water pollutants during the construction phase of any individual project (MM 4.9-1).

Pursuant to SC 4.9-1, Chapter 19.20 of the City's Municipal Code supplements the NPDES requirements. Compliance with this standard condition would reduce pollutants in storm water from future development and redevelopment. Policy PF-5.2 in the proposed 2010 General Plan Update calls for support for agencies that would provide and/or expand water treatment facilities to treat local water sources from canyon surface waters and groundwater. Policy PF-6.1 calls for adequate wastewater treatment and collection while protecting water quality and public health.

In addition to compliance with applicable SCs and 2010 General Plan Update Policies, implementation of MMs 4.9-1 and 4.9-2 would require preparation of a SWPPP and MMs 4.9-6 and 4.9-7 identify appropriate methods for controlling discharge of debris and sediment into water bodies and 4.9-8 controls use of fertilizers/pesticides/herbicides through preparation of a landscaping plan. Therefore, the potential impact related to water quality would be reduced to a less than significant level.

Impact 4.9f: Adherence to policies PF-5.2 and PF-1 and SCs 4.9-1 and 4.9-2 and implementation of MMs 4.9-1, 4.9-2, 4.9-3, 4.9-4, and 4.9-6 through 4.9-8 would reduce the potential impact related to water quality to a less than significant level.

Flood Hazards: Housing

Threshold 4.9g: Would the proposed General Plan Update place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed Land Use Plan designates the majority of the 100-year floodplain as Flood Control/Utility Corridor and Conservation Areas where no development is allowed. However, some areas are designated as Hillside Residential, Open Space, or Very Low Density Residential where residential structures may be developed in the future. Future residential development and redevelopment pursuant to the proposed 2010 General Plan Update in these areas would be exposed to flood hazards.

SC 4.9-4 requires all structures and land uses within the designated floodplains to comply with the City's Floodplain Management Regulations. These regulations would keep future development and redevelopment under the proposed 2010 General Plan Update protected from flood hazards through the implementation of various flood hazard reduction measures. Also, SC 4.9-5 requires the construction of needed storm drain facilities or the payment of fees for storm drainage system improvements. Compliance with these standard conditions would prevent exposure of new development and redevelopment to flood hazards and would provide the storm drainage infrastructure necessary to prevent flood hazards. In addition, the Santa Ana River Mainstream Project (SC 4.9-6) will provide regional storm drainage improvements for increased flood protection to the communities within Orange, San Bernardino and Riverside Counties.

In addition, the proposed 2010 General Plan Update includes Goal PS-7, which calls for adequate and appropriately designed storm drainage and flood control facilities. Supporting policies include upgrade and expansion of the flood control system so that the community is protected from flooding (Policy PS-7.1) and maintenance of the flood control system and upstream tributary areas (Policy PS-7.2). The goal and policies would reduce flood hazards in the City.

Compliance with pertinent standard conditions and proposed 2010 General Plan Update goal and policies would result in less than significant impacts; no mitigation is required.

Impact 4.9g: Future residential development and redevelopment may be located in the designated 100-year floodplain. Compliance with the City's Floodplain Management Regulations (SC 4.9-4) and construction of the necessary local storm drain infrastructure (SC 4.9-5) and improvements of the regional storm drainage facilities (SC 4.9-6) would prevent any significant adverse impacts related to the placement of housing within a 100-year flood hazard area; no mitigation is required.

Flood Hazards: Structures

Threshold 4.9h: **Would the proposed General Plan Update place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

Areas along various creeks and channels in the City are located within the 100-year flood hazard area, as mapped by FEMA and shown in Exhibit 4.9-3. Structures that would be built within the 100-year floodplain as part of future development and redevelopment under the proposed 2010 General Plan Update would potentially impede or redirect flood flows.

SC 4.9-4 requires all structures and land uses within the designated floodplains to comply with the City's Floodplain Management Regulations. These regulations would keep future development and redevelopment pursuant to the proposed 2010 General Plan Update protected from flood hazards through the implementation of various flood hazard reduction measures. Additionally, regulations require structures and land uses to prevent an increase of more than one foot in the base flood level where base flood elevations have been determined but a floodway has not been designated. Compliance with the regulations would prevent the impediment or redirection of flood flows. Thus, impacts related to the impediment or redirection of flood flows would be less than significant; no mitigation is required.

Impact 4.9h: Structures built as part of future development and redevelopment under the proposed 2010 General Plan Update could impede or redirect flood flows. Impacts would be less than significant with compliance with the City's Floodplain Management Regulations (SC 4.9-4); mitigation is not required.

Flood Hazards: Dam Inundation and Mudflows

Threshold 4.9i: **Would the proposed General Plan Update expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or, inundation by seiche, tsunami, or mudflow?**

Dam Inundation

The City is located within the dam inundation area of San Antonio Dam and several debris basins, as shown in Exhibit 4.9-4. Hazards from dam inundation would affect future development and redevelopment proposed in these areas.

Failure of the San Antonio Dam due to acts of terrorism, earthquake, or other damage when the dam is at capacity may lead to floodwaters reaching the southwestern end of the City within 30 minutes of dam failure, with flood waters reaching peak elevation of 7 feet in 45 minutes. The flooded areas could sustain damage from rapidly flowing water, severe erosion, and associated floating debris. Additionally, inundation from the debris basins and levees along the creeks would lead to flooding of the areas downstream of these facilities (similar to the limits and hazards of the 500-year floodplain).

Per SC 4.9-9, the San Bernardino County Department of Public Works provides ongoing maintenance of the creeks, debris basins, levees, and spreading grounds located in and north of the City, which reduce storm water flows in canyons and flood hazards. Ongoing maintenance of debris basins, channels, and spreading grounds by the County would reduce inundation hazards from debris basins.

Compliance with the City's Floodplain Management Regulations (under SC 4.9-4) would ensure that future development and redevelopment are adequately anchored to prevent flotation, collapse, or lateral movement of structures within the designated floodplains, which includes the inundation areas of the debris basins. Regulations also include standards for development in mudslide-prone and erosion-prone areas. Compliance with SC 4.9-4 would reduce inundation hazards to future development and redevelopment.

As required by FEMA, the USACE has prepared an emergency action plan, which specifies warning, evacuation, and post-flood actions that need to be taken by assigned individuals in the event of dam failure. Implementation of the emergency action plan would warn residents, employees and visitors in the southwestern corner of the City and allow for evacuation to areas outside the inundation zones. This would reduce personal injury and property damage to existing and future developments within the dam's potential inundation area to the extent feasible (SC 4.9-10).

While future development and redevelopment would be exposed to these inundation hazards, the 2010 General Plan Update would not increase these hazards in the City or the surrounding area. Policy PS-7.4 in the proposed 2010 General Plan Update contains a standard for a minimum level of acceptable risk for development in potential inundation areas, and requires mitigation to the satisfaction of the Building and Safety Department and other responsible agencies.

Thus, development standards and emergency plans in the event of dam failure would reduce impacts relating to dam inundation to less than significant levels; no mitigation is required.

Mudflows

The hillside areas at the northern end of the City have a potential for mudflow hazards. The County has constructed and maintains a number of debris basins and spreading grounds near the foothills of the San Gabriel Mountains to reduce the volume and velocity of runoff and to prevent mudflow. These facilities include the Cucamonga Creek Debris Basin, Deer Canyon Debris Basin, Day Creek Debris Basin, Alta Loma Basins, Etiwanda Creek Debris Basin, Demens Creek Debris Basin, and San Sevaine Debris Basin.

Ongoing maintenance of the creeks, debris basins, and spreading grounds in and near the City (SC 4.9-9) would reduce mudflows and the hazards associated with them. The City's Floodplain Management Regulations (under SC 4.9-4) also include standards for development in mudslide-prone and erosion-prone areas. Compliance with SCs 4.9-9 and 4.9-4 would reduce mudflow hazards to future development and redevelopment under the proposed 2010 General Plan Update; no mitigation measures are required.

Tsunami

The City is located inland, and future development and redevelopment would not be subject to tsunami hazards. There would be no impact; no mitigation is required.

Seiche

There are no large open water bodies in or near Rancho Cucamonga other than the San Antonio Dam and the debris basins at the canyons in the northern section of the City and in the SOI. Impacts associated with failure of these facilities are discussed above. Impacts to future development and redevelopment would be less than significant; no mitigation is required.

Impact 4.9i: Impacts associated with flooding due to dam or levee failure and inundation by seiche or mudflow would be less than significant with compliance with existing regulations (SCs 4.9-4, 4.9-9, and 4.9-10). No impacts from tsunami hazards would occur.

4.9.7 CUMULATIVE IMPACTS

Cumulative hydrology and water impacts are considered in the Santa Ana River watershed, where the City of Rancho Cucamonga is located. While this area extends beyond County boundaries, areas downstream of the City and in other areas in San Bernardino County and in Orange County could be affected by storm water volumes and pollutants that would be generated within the City.

Future development and redevelopment within the Santa Ana River watershed would generate new sources for urban pollutants, which could impact of surface water quality and groundwater resources. However, construction activities are regulated under the NPDES and Construction General Permit for the State. NOIs and SWPPPs are required for construction activities in order to reduce pollutants in storm water during temporary ground-disturbing activities. San Bernardino and Orange Counties and participating Cities (Co-permittees) have also adopted programs for long-term storm water pollution mitigation by requiring WQMPs for individual developments. In addition, the Santa Ana RWQCB's WDRs impose conditions, prohibitions, and guidelines for individual developments that may lead to discharges into the storm drain system or surface water bodies. These regulations implement the Water Quality Control Plan for the Santa Ana River Basin and help meet the established water quality objectives for both groundwater and surface water bodies. No cumulative adverse impacts on hydrology and water quality are expected from the proposed 2010 General Plan Update and future development and redevelopment within the Santa Ana River watershed.

Increases in the resident population and intensity of development in the Santa Ana River watershed would result in a greater demand for water, increased pumping of the groundwater basins, and greater use of imported water sources. The Chino Basin Watermaster is responsible for monitoring groundwater levels and water quality, including the safe operation yields of the Chino Basin and extraction limits and amounts. The CVWD and participating entities together manage the adjudication of the Cucamonga Basin as part of the Chino Basin. Continued management of the groundwater basins and compliance with the pertinent adjudication orders would prevent overdraft conditions, water quality problems, and other impacts on groundwater resources in the watershed.

Future development and redevelopment within the watershed would increase impermeable surfaces and decrease water percolation areas. Increases in impervious surfaces would reduce recharge, but since individual project sites are limited in size and are not designated as groundwater recharge areas, no significant adverse impacts are expected. Increases in runoff volumes would increase storm water volumes and flow rates in local and regional drainage channels. The regional channels have been designed to accommodate runoff from the entire watershed, and new developments are required to provide on-site improvements and other storm drainage system upgrades to prevent the creation of flood hazards at downstream areas. Thus, no cumulative adverse impacts related to flood hazards or inadequate storm drainage would occur.

Several debris basins and dams at the foothills of the San Gabriel and San Bernardino Mountains pose inundation hazards to downstream areas in the event of dam failure. Dam failure could affect existing and future developments in the watershed. The potential for property damage and personal injury is reduced by the construction of dams in accordance with State

and Federal dam safety regulations and the preparation of emergency action plans for individual dams, which include warning, evacuation, and post-disaster actions. Cumulative impacts from dam inundation would be less than significant.

The hazards associated with a tsunami are confined to the shoreline and coastal areas of Orange County. The City of Rancho Cucamonga and San Bernardino County would not be exposed to these hazards nor would the proposed 2010 General Plan Update increase exposure or create these hazards. Seiche hazards would affect local areas downstream of a water body or reservoir and would not create cumulative impacts. Future development and redevelopment on steep hillside areas may be exposed to potential mudflow hazards. The debris basins that have been constructed by the San Bernardino County Department of Public Works at the foothills of the San Gabriel and San Bernardino Mountains are expected to reduce storm water flows and debris volumes. Thus, cumulative impacts would be less than significant.

4.9.8 MITIGATION MEASURES

MM 4.9-1 Prior to issuance of grading permits, the permit applicant shall submit to Building Official for approval, Storm Water Pollution Prevention Plan (SWPPP) specifically identifying Best Management Practices (BMPs) that shall be used on-site to reduce pollutants during construction activities entering the storm drain system to the maximum extent practicable.

MM 4.9-2 Prior to issuance of grading or paving permits, applicant shall obtain a Notice of Intent (NOI) to comply with obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit from the State Water Resources Control Board. Evidence that this has been obtained (i.e., a copy of the Waste Discharger's Identification Number (shall be submitted to the City Building Official for coverage under the NPDES General Construction Permit.

MM 4.9-3 Prior to issuance of building permits, the applicant shall submit to the City Engineer for approval of a Water Quality Management Plan (WQMP), including a project description and identifying Best Management Practices (BMPs) that will be used on-site to reduce pollutants into the storm drain system to the maximum extent practicable. The WQMP shall identify the structural and non-structural measures consistent with the current Guidelines for New Development and Redevelopment adopted by the City of Rancho Cucamonga.

MM 4.9-4 The developer shall implement the BMPs identified in the Water Quality Management Plan prepared by (name/date) to reduce pollutants after construction entering the storm drain system to the maximum extent practical.

MM 4.9-5 An Erosion Control Plan shall be prepared, included in the Grading Plan, and implemented for the proposed project that identifies specific measures to control on-site and off-site erosion from the time ground disturbing activities are initiated through completion of grading. This Erosion Control Plan shall include the following measures at a minimum: a) Specify the timing of grading and construction to minimize soil exposure to rainy periods experienced in Southern California, and b) An inspection and maintenance program shall be included to ensure that any erosion which does occur either on-site or off-site as a result of this project will be corrected through a remediation or restoration program within a specified time frame.

- MM 4.9-6** During construction, temporary berms such as sandbags or gravel dikes must be used to prevent discharge of debris or sediment from the site when there is rainfall or other runoff.
- MM 4.9-7** During construction, to remove pollutants, street cleaning will be performed prior to storm events and after the use of water trucks to control dust in order to prevent discharge of debris or sediment from the site.
- MM 4.9-8** Landscaping plans shall include provisions for controlling and minimizing the use of fertilizers/pesticides/herbicides. Landscaped areas shall be monitored and maintained for at least two years to ensure adequate coverage and stable growth. Plans for these areas, including monitoring provisions for a minimum of two years, shall be submitted to the City for review and approval prior to the issuance of grading permits.

4.9.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Water Quality and Waste Discharge Standards

Less Than Significant With Mitigation.

Groundwater

Less Than Significant.

Drainage and Erosion

Less Than Significant With Mitigation.

Drainage Patterns

Less Than Significant.

Surface Runoff

Less Than Significant With Mitigation.

Water Quality

Less Than Significant With Mitigation.

Flood Hazards: Housing

Less Than Significant.

Flood Hazards: Structures

Less Than Significant.

Flood Hazards: Dam Inundation and Mudflows

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.10 LAND USE AND PLANNING

This section describes the existing land uses in the City of Rancho Cucamonga, along with planned land uses under the currently adopted General Plan for the City. It also discusses the proposed 2010 General Plan Update; proposed changes in existing land uses and planned land uses, as allowed under the proposed Land Use Plan; and consistency of the proposed 2010 General Plan Update with regional plans and policies.

Information presented in this section is based on the Land Use Background Report that was prepared as part of the 2010 General Plan Update. The report discusses existing and planned land uses in the City and identifies development constraints and opportunities for land use changes over the next 20 years.

4.10.1 RELEVANT POLICIES AND REGULATIONS

Regional and local land use and planning programs that affect the City include SCAG's Compass Blueprint and Regional Comprehensive Plan; the currently adopted Rancho Cucamonga General Plan; the Rancho Redevelopment Project; and the City's Development Code.

Regional

Southern California Association of Governments

SCAG is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO, SCAG is mandated by the Federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Among leading activities SCAG undertakes include the measures listed below.

- Maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program (RTIP).
- Development of demographic projections plus the integrated land use, housing, employment, transportation programs, measures, and strategies portions of the South Coast Air Quality Management Plan (AQMP), as well as serving as co-lead agency for air quality planning for the Central Coast and Southeast Desert air basin districts.
- Responsibility under the Federal Clean Air Act for determining projects', plans', and programs' conformity with the applicable Air Plan (in this case, the AQMP).
- The function as the authorized regional agency for intergovernmental review of programs proposed for Federal financial assistance and direct development activities.
- Review of environmental impact reports for projects having regional significance for consistency with regional plans.
- The function of the authorized areawide waste treatment management planning agency, pursuant to Federal water pollution control statutes.
- Responsibility, under State law, for preparation of the Regional Housing Needs Assessment.

- Responsibility, along with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council, for preparing the Southern California Hazardous Waste Management Plan pursuant to the *California Health and Safety Code*.

SCAG has developed four regional plans for the Southern California region: the Compass Blueprint, the Regional Comprehensive Plan, the Regional Housing Needs Assessment, and the Regional Transportation Plan. All address growth and development in the six counties and 38,000 square miles that comprise the Southern California region (except for San Diego County). These plans were developed to provide a unified effort in addressing the needs, opportunities, resources, and issues that face the region.

Compass Blueprint

SCAG's Compass Blueprint program considers future growth in the region in response to the land use and transportation challenges facing Southern California. The program developed a regional vision that defines the desired future scenario for Southern California. The program's Growth Vision is driven by the need to:

- Improve Mobility for all residents;
- Foster Livability in all communities;
- Enable Prosperity for all people; and
- Promote Sustainability for future generations.

The program takes the following into consideration for additional growth and includes the changing trends in these issues: population diversity; housing; jobs; transportation; land; and pollution, including. Research, surveys and workshops were conducted throughout the region, coupled with extensive land use and transportation modeling of the future scenario, to identify implementation tools that would help achieve the Growth Vision.

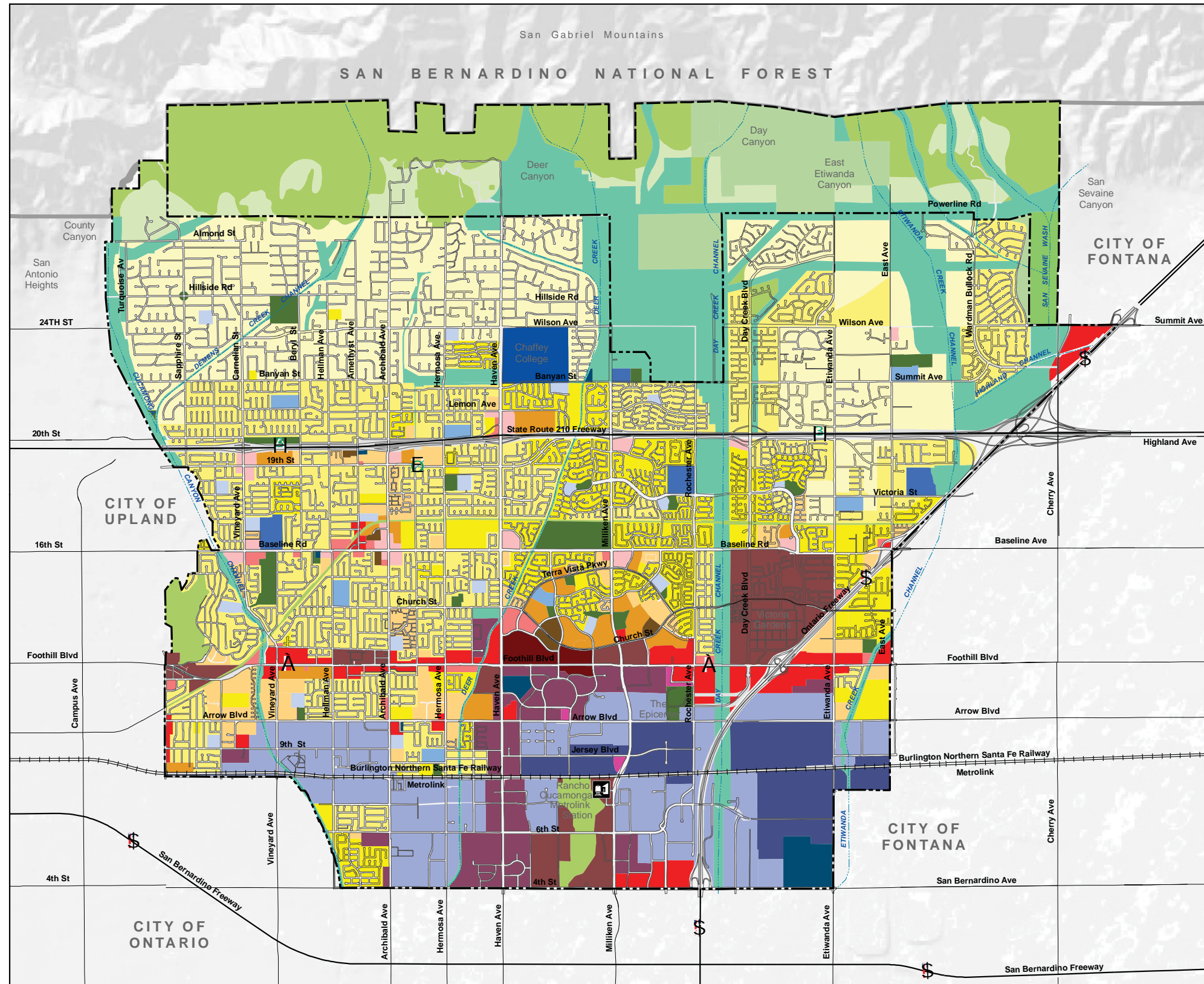
In developing the Growth Vision for the Compass Blueprint program, SCAG's population, housing and employment forecasts show that the County of San Bernardino would have an estimated 3.13 million residents, approximately 972,561 households, and 1.25 million jobs by the year 2035, while the City of Rancho Cucamonga is projected to be occupied by 172,420 residents, with 55,181 households and 97,874 jobs by 2035.

SCAG proposes to achieve the principles of Mobility, Livability, Prosperity, and Sustainability by:

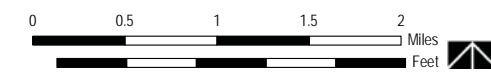
- Focusing growth in existing and emerging centers and along major transportation corridors,
- Creating significant areas of mixed-use development and walkable communities,
- Targeting growth around existing and planned transit stations, and
- Preserving existing open space and stable residential areas.

Regional Comprehensive Plan

SCAG's Regional Comprehensive Plan (RCP) provides a policy framework for regional planning in Southern California. The RCP calls for city and county involvement and coordination in



- Legend**
- Rancho Cucamonga City Boundary
 - - - Sphere of Influence
 - ==== Railroad
- General Plan**
- HILLSIDE RESIDENTIAL
 - VERY LOW
 - LOW
 - LOW MEDIUM
 - MEDIUM
 - MEDIUM HIGH
 - HIGH
 - NEIGHBORHOOD COMMERCIAL
 - GENERAL COMMERCIAL
 - COMMUNITY COMMERCIAL
 - OFFICE
 - MIXED USE
 - COMMERCIAL RECREATION
 - GENERAL INDUSTRIAL
 - HEAVY INDUSTRIAL
 - INDUSTRIAL PARK
 - CIVIC / REGIONAL
 - ELEMENTARY SCHOOL
 - JUNIOR HIGH SCHOOL
 - HIGH SCHOOL
 - COMMUNITY COLLEGE
 - CONSERVATION/DISPUTED
 - FLOOD CONTROL / UTILITY CORRIDOR
 - CONSERVATION
 - OPEN SPACE
 - PARK
 - MAJOR ROADS



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2001 General Plan Land Use Map

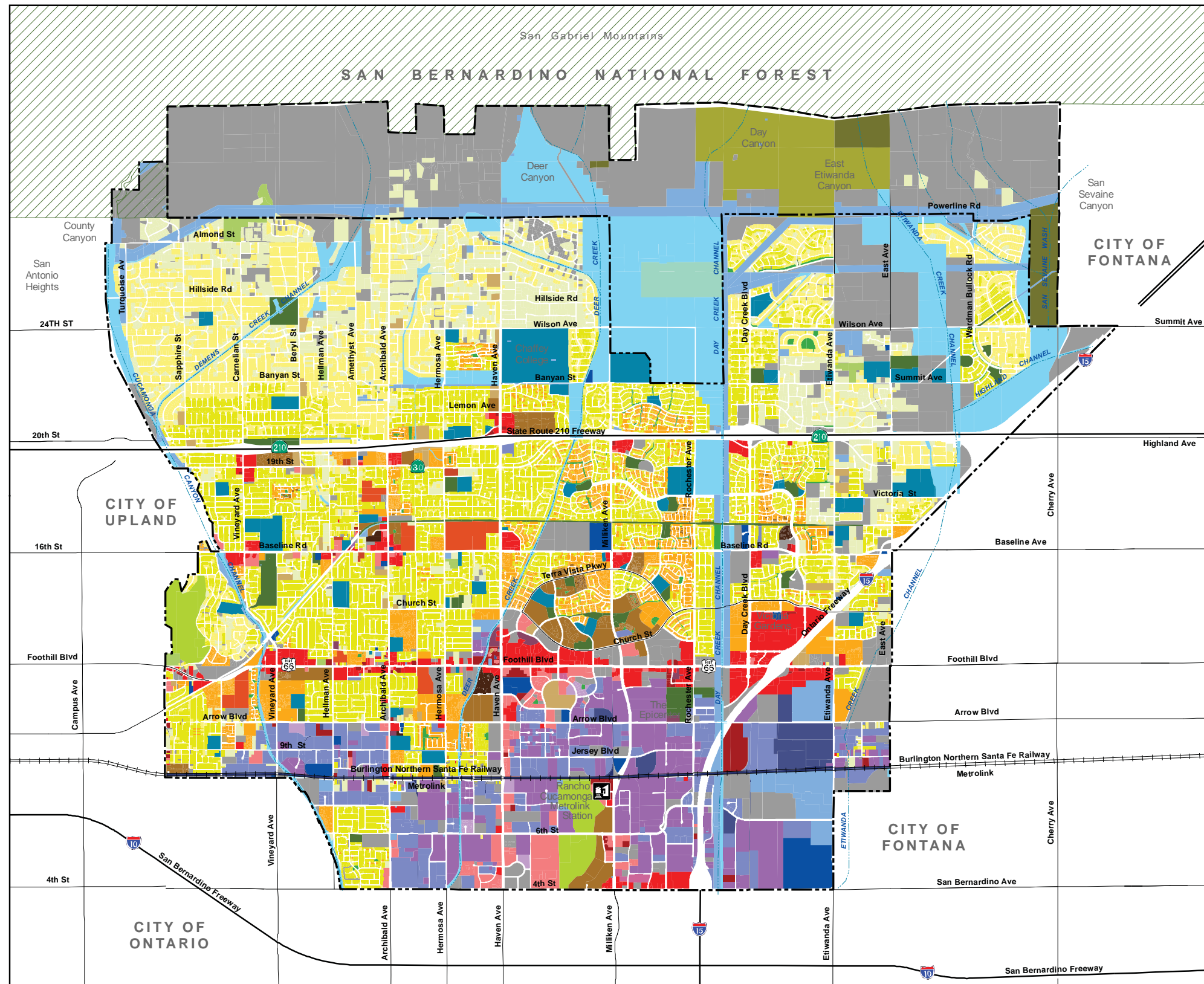
Rancho Cucamonga General Plan Update

Source: City of Rancho Cucamonga GIS 2008

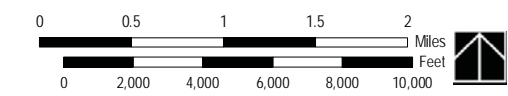
Exhibit 4.10-1



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- Legend**
- Existing Land Use (2008)**
- Residential*
- Very Low (0.1-2.0 du/ac)
 - Low (2.1-4.0 du/ac)
 - Low Medium (4.1-8.0 du/ac)
 - Medium (8.1-14.0 du/ac)
 - Medium High (14.1-24.0 du/ac)
 - High (24 + du/ac)
 - Mobile Home Park
- Commercial, Office, and Retail*
- Office
 - Retail, Shopping Center, Restaurant
 - Automotive Commercial Services
 - Hotel/Motel
 - Commercial Entertainment/Recreation
- Industrial*
- Business Park
 - Warehouse/Distribution
 - Light Industrial
 - Heavy Industrial
 - Aggregate Mining
- Public Facilities and Quasi-Public*
- Utilities
 - Flood Control
 - Schools
 - Civic/Public Facilities
 - Rail Lines
- Open Space and Recreation*
- Open Space
 - Conservation
 - Agriculture
 - Golf Course
 - Recreation/Parks
 - Private Recreation (HOA)
- Other*
- Religious Institution
 - Convalescent Hospital/Assisted Living
 - Vacant
- Rancho Cucamonga City Boundary
- Sphere of Influence



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Existing Land Uses
Rancho Cucamonga General Plan Update

Source: City of Rancho Cucamonga 2001

Exhibit 4.10-2



addressing regional issues related to growth management and development. It serves as an advisory document for preparing local plans and handling issues of regional significance, such as land use and housing, open space and biological habitats, water, energy, air quality, solid waste, transportation, security and emergency preparedness, economy, and education. The RCP promotes an integrated approach between SCAG, State and local governments, transportation commissions, resources agencies and conservation groups, the private sector, and the general public. The RCP embodies the principles of the Compass Blueprint program and addresses regional issues through its adopted goals, outcomes, and an action plan of constrained policies and strategic initiatives that can be implemented by the different cooperating agencies and entities.

The Regional Housing Needs Assessment is discussed in Section 4.13, Population and Housing, and the Regional Transportation Plan is discussed in Section 4.16, Transportation and Traffic, of this EIR.

Local

Rancho Cucamonga General Plan

California law requires every city to adopt a comprehensive, long-range plan for its physical development. The Rancho Cucamonga General Plan was last updated in 2001. The current General Plan meets the mandates of the *California Government Code* and includes the following chapters:

- ***Chapter I, Shaping the Future of Rancho Cucamonga:*** This is the introduction to the General Plan.
- ***Chapter II, The Rancho Cucamonga Vision:*** This chapter expresses the City's vision for its future, which is anchored on the following values:
 - Keeping the Family at the Center,
 - Enhancing a Sense of Community,
 - Sustaining a Memorable Place,
 - Cherishing Our Legacy,
 - Designing Quality into Our Environment,
 - Being Involved in Our Community,
 - Maintaining a Strong Economy,
 - Operating the City Responsibly,
 - Shaping Our Surroundings,
 - Celebrating Community.
- ***Chapter III, Developing the Community:*** This chapter addresses issues related to land use, transportation, housing, public facilities and services, community design, and economic development. This chapter includes the Land Use Plan for the City, which identifies the types, extent, locations, intensities, and distribution of planned land uses. Exhibit 4.10-1, 2001 General Plan Land Use Map, shows the current Land Use Plan and Table 4.10-1 provides the area breakdown for each land use designation.

**TABLE 4.10-1
LAND USE DESIGNATIONS**

Existing Land Use Designation	Allowable Density/Intensity	City Land Area in acres	Sphere of Influence Land Area in acres
Residential			
Very Low	0.1–2 du/ac	3,979	620
Low	2–4 du/ac	4,148	33
Low Medium	4–8 du/ac	2,042	–
Medium	8–14 du/ac	736	–
Medium High	14–24 du/ac	376	–
High	24–30 du/ac	55	–
Commercial			
Office	0.4–1.0 FAR	128	–
Neighborhood Commercial	0.25–0.35 FAR	167	–
Community Commercial	0.25–0.35 FAR	109	–
General Commercial	0.25–0.35 FAR	528	–
Recreation Commercial	0.25–0.35 FAR	9	–
Mixed Uses			
Mixed Use (residential)	20 du/ac	235	–
Mixed Use (commercial)	0.25–1.0 FAR	628	–
Industrial			
Industrial Park	0.4–0.6 FAR	657	–
- Haven Overlay	0.4–1.0 FAR	198	–
General Industrial	0.5–0.6 FAR	2,016	–
Heavy Industrial	0.4–0.5 FAR	904	–
Open Space			
Hillside	0.1-2 du/ac	127	697
Open Space	0.1 du/ac	491	2,512
Conservation	–	86	1,262
Flood Control/Utility Corridor	–	1,705	1,928
Public Facilities			
Civic/Regional	0.4–1.0 FAR	166	–
Community College	0.1–0.2 FAR	191	–
Elementary School	0.1–0.2 FAR	169	–
High School	0.1–0.2 FAR	118	–
Junior High School	0.1–0.2 FAR	131	–
Park	–	371	–
Arterials/Freeway	–	4,063	100
	Total	24,533	7,152
du: dwelling unit; ac: acre; FAR: Floor Area Ratio – not applicable			
Source: 2001 General Plan for Rancho Cucamonga, 2001.			

Chapter III also includes the Circulation Plan, which defines the roadway classification for each segment of existing and future proposed arterial roads and highways in the City and SOI. In addition, it includes the Housing Chapter, which identifies the City's programs and objectives for housing development and assistance, in response to specific State requirements on the contents of Housing Chapters.

- **Chapter IV, Managing Environmental Resources:** This chapter addresses issues related to land resources, water resources, plants and animals, energy, and cultural assets. It provides policy direction conserving natural and cultural resources in the City and its SOI.

- **Chapter V, Maintaining Public Health and Safety:** Chapter V addresses issues related to seismic (earthquake) and geologic hazards, flood hazards and inundation, fire and emergency services, emergency preparedness, hazardous materials, crime and crime prevention, miscellaneous hazards, noise, and air quality. It identifies public services and facilities needed to support safety functions, and it expresses the City's commitments to a safe living environment.
- **Chapter VI, Implementing the General Plan:** Chapter VI describes set strategies for carrying out the goals and policies of the General Plan. This includes the Development Code's consistency with the General Plan, the commitment of organizational resources and procedures, and the use of various funding and financing mechanisms.

Rancho Cucamonga Development Code

Title 17 of the Rancho Cucamonga Municipal Code is the City's Development Code. The Code contains regulations that identify the permitted land uses on all parcels in the City through assigned districts, along with applicable use regulations, site development criteria (e.g., lot size, density/intensity, yard setbacks, open space, heights, parking, landscaped areas), performance standards, and general design regulations (e.g., site design, building orientation, access, parking areas, landscaping, fencing/screening, lighting, building design). The Code's main purpose is to protect and promote the public's health, safety, morals, comfort, convenience, and welfare, along with the following more specific purposes:

1. To implement the goals and objectives of the General Plan and to guide and manage the future growth of the City in accordance with such plan;
2. To protect the physical, social, and economic stability of residential, commercial, industrial, and other land uses within the City to assure its orderly and beneficial development;
3. To reduce hazards to the public resulting from the inappropriate location, use, or design of buildings and other improvements; and
4. To attain the physical, social, and economic advantages resulting from comprehensive and orderly land use and resource plans.

The Code does not allow development that is not consistent with the Land Use Chapter of the General Plan in terms of allowable land use, as shown in the Land Use Map and conformity with the programs and standards of the Land Use Chapter.

Rancho Redevelopment Project

The Rancho Redevelopment Project was adopted in 1981 and revised in 1987, and encompasses an approximately 8,500-acre area at the southern section of the City, generally south of the State Route (SR) 210 Freeway; east of Haven, Hermosa and Archibald Avenues; north of 4th Street; and west of Etiwanda Avenue. It also includes the commercial corridor along Foothill Boulevard. This area is developed with industrial uses in its southern section, commercial uses at its center, and residential uses on the northern section of the project area.

The Redevelopment Agency activities have included attracting new businesses into the area, improving roadway and infrastructure systems, providing public services, and creating employment and recreational opportunities. The Agency has also been involved in rehabilitating existing structures, acquiring land, constructing new buildings, and developing or rehabilitating

affordable housing projects. Redevelopment activities within this project area are required to comply with the City's General Plan and Development Code.

A number of commercial industrial, residential, and recreational projects have been completed in the project area, with the assistance of the Redevelopment Agency, along with improvements to existing infrastructure and public facilities.

4.10.2 EXISTING CONDITIONS

The City of Rancho Cucamonga is located at the base of the San Gabriel Mountains in western San Bernardino County. It is bound by the cities of Upland, Ontario, Fontana, and the San Bernardino National Forest and parts of unincorporated areas of San Bernardino County. The City has a land area of approximately 40 square miles, with another 10 square miles in its SOI. The SOI extends from the City's northern boundaries up to the San Bernardino National Forest.

The City is largely developed, with the area north of Foothill Boulevard (about two-thirds of the City) developed primarily with residential uses. Residential uses cover a total of approximately 10,159 acres (37.8 percent) of the City and SOI, and include single-family attached and detached units, duplexes, triplexes, fourplexes, condominiums, apartments, townhomes, senior apartments, mobile homes, and planned unit developments. Residential uses located in the communities historically known as Alta Loma and Etiwanda (northern section of the City) include large-lot, single-family detached homes. The lots are gradually larger in the northern areas of Alta Loma and Etiwanda. The majority of the higher density housing (such as townhomes, condominiums, and apartment complexes) are located in the central portion of the City. The California Department of Finance estimates the City's January 2009 housing stock at 55,716 dwelling units (Hogle 2009).

The area south of Foothill Boulevard is generally developed with industrial uses which, together with the mining operation in Day Creek, covers a total of 2,520 acres (9.4 percent). Industrial uses include light and heavy industrial, warehouse and distribution, and business park uses. Most of these uses are located south of Arrow Highway in the western portion of the City, and south of Foothill Boulevard in the eastern portion of the City. Approximately 25.58 million square feet (sf) of industrial development is present in the City.

Commercial uses are found along Foothill Boulevard, several other major roadways, and at major street intersections, particularly along Base Line Road, Archibald Avenue, and 19th Street. A total of 1,307 acres (6.2 percent) is developed with commercial uses, consisting of office, commercial, retail, shopping center, restaurants, and automotive uses. Financial and administrative offices, office condominiums, medical offices, and other general office uses are primarily located on Haven Avenue and near the Civic Center. Older shopping centers are generally located in the western portion of the City, west of Haven Avenue, while newer shopping centers are in the eastern portion of the City, east of Haven Avenue. Approximately 11.24 million square feet of commercial development is present in the City.

Civic and other public facilities are found in the southern section of the City and include government buildings, City Hall, the post office, fire stations, and multi-purpose community facilities. Flood-control and utility corridors include catch basins; levees; storm drainage channels; spreading basins; cellular towers; water, gas, and electrical transmission lines; electrical plants and facilities; and water district facilities. Open space, recreation and other uses include parks and recreation facilities, homeowners association private recreation areas, golf courses, and agricultural lands (mainly located in the SOI).

During the early 2000s, the opening of the portion of the SR-210 Freeway in the City led to significant residential development in the City's northeastern section of the City, with the Victoria Gardens Lifestyle Center opening in 2005. Various commercial uses were then developed south of the mall and along Foothill Boulevard near the I-15 Freeway.

Today, the City is estimated to be 87 percent built out, with the majority of undeveloped land in the SOI, where approximately 4,156 acres of land remain vacant. Exhibit 4.10-2, Existing Land Uses, shows the existing land uses, and Table 4.10-1 provides the acreage breakdown of these land uses.

Over 2,600 acres of vacant land remain in the City, with an additional 4,156 acres in the SOI. The vacant lands within the City are located on scattered sites and are surrounded by urban development, except for the larger parcels along and near the Etiwanda Creek at the northeastern section. The vacant lands in the SOI consist of large, contiguous parcels outside the Deer, Day, and East Etiwanda canyons and creeks.

4.10.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to land use and planning if it would:

Threshold 4.10a: Physically divide an established community;

Threshold 4.10b: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or,

Threshold 4.10c: Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.10.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address protection of the City's residential neighborhoods and other desirable land uses. Implementation of these goals and policies and their corresponding implementation actions would reduce impacts on land use and planning. The Land Use, Community Design and Historic Resources Chapter includes goals and policies related to land use, as follows listed below.

GOAL LU-1: Ensure established residential neighborhoods are preserved and protected, and local and community-serving commercial and community facilities meet the needs of residents.

Policy LU-1.1: Protect neighborhoods from the encroachment of incompatible activities or land uses that may have a negative impact on the residential living environment.

Implementation Action: *Review and amend the residential zoning classifications of the Development Code to ensure that the allowable land uses are compatible with densities of residential neighborhoods.*

Policy LU-1.2: Designate appropriate land uses to serve local needs and be able to respond to regional market needs, as appropriate.

Implementation Action: Continue establishing cooperative partnerships between the City, other agencies, the development community, and residential organizations through the use of early consultation for project inception. Consider policies and procedures for City staff to require this consultation as part of a pre-application process to ensure that remaining infill properties (vacant, undeveloped, underutilized) are developed to respond to each of the City's unique residential neighborhood's needs.

Policy LU-1.3: Encourage commercial centers that serve a broad range of retail and service needs for the community.

Implementation Action: Review and amend the Development Code to ensure that the purpose and intent of zoning classifications clearly implement the description of relevant General Plan land use designations.

Policy LU-1.4: Continue code enforcement activities to ensure proper maintenance of homes, buildings, yards, and neighborhoods in all areas of the City, and work with businesses and homeowners to gain compliance.

Implementation Action: Continue to enforce property maintenance standards, noise regulations, and other property related regulatory standards adopted by the City.

Policy LU-1.5: Development of densities and intensities shall be implemented within the ranges specified in the General Plan; neither higher nor lower than the limits of the range.

Implementation Action: Review and modify the Development Code, as necessary, to ensure that the development standards listed for each zoning classification are consistent with and address both sides of the density range.

Policy LU-1.6: Encourage small-lot single-unit attached and/or detached residential development (5,200-square-foot lots or smaller) to locate in areas where this density would be compatible with adjacent residential neighborhoods.

Implementation Action: Review and modify the Development Code and corresponding zoning maps to ensure that the small-lot single family housing type can be accommodated within those residential districts with an underlying Medium Residential land use designation.

GOAL LU-2: Facilitate sustainable and attractive infill development that complements surrounding neighborhoods and is accessible to pedestrians, bicycles, transit, and automobiles.

Policy LU-2.1: Plan for vibrant, pedestrian-friendly mixed use and high-density residential areas at strategic infill locations along transit routes.

Implementation Action: Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.

Policy LU-2.2: Require new infill development to be designed for pedestrians and automobiles equally, and to provide connections to transit and bicycle facilities.

Implementation Action: Continue development review of applications for infill development between the various City departments and regional-serving agencies to coordinate and maximize non-vehicular connections within the proposed developments and connecting to other areas of the City.

Policy LU-2.3: Provide direct pedestrian connections between development projects where possible.

Implementation Action: Establish procedures that allow City staff, during their review of infill development applications, to require pedestrian access studies to ensure that each development has maximized convenient and safe pedestrian connections to existing surrounding developments and public rights-of-way.

Policy LU-2.4: Promote complementary infill development, rehabilitation, and re-use that contribute positively to the surrounding residential neighborhood areas.

Implementation Action: Develop guidelines or standards that are specific to potential infill development sites to ensure that developers have considered the individual needs of the community and unique characteristics of the aesthetics, particularly those lots identified within each of the specific mixed use designations.

Policy LU-2.5: Facilitate effective use of land constrained by challenging parcel sizes and dimensions, and encourage consolidation of parcels to provide greater development flexibility.

Implementation Action: Encourage infill development proposals to combine parcels and achieve superior design solutions to address site constraints and aesthetic quality.

GOAL LU-3: Encourage sustainable development patterns that link transportation improvements and planned growth, create a healthy balance of jobs and housing, and protect the natural environment.

Policy LU-3.1: Encourage the creation and maintenance of regional employment, cultural and retail destinations, as well as a full range of amenities and services to support residents of Rancho Cucamonga.

Implementation Action: Continue to implement the City's economic development programs and community services programs.

Policy LU-3.2: Encourage a mix of retail, service, industrial and manufacturing, and professional uses that creates diverse, well-paying employment opportunities.

Implementation Action: Focus economic development initiatives on infill sites and on businesses that can provide a range of employment opportunities for skilled and professional workers.

Policy LU-3.3: Locate regionally serving land uses with immediate access to the regional transportation network that is designed to provide maximum access capabilities and permit maximum dispersal of traffic.

Implementation Action: Review and modify, as necessary, zoning designations along Foothill Boulevard and I-15 for consistency with General Plan land use designations.

Policy LU-3.4: Promote development that is sustainable in its use of land and that limits impacts to natural resources, energy, and air and water quality.

Implementation Action: *Adopt a sustainable development program that incorporates green building standards.*

Policy LU-3.5: Work toward a sustainable jobs-housing balance by accommodating a range and balance of land uses within Rancho Cucamonga.

Implementation Action: *Continue with business retention and attraction programs, and promote residential development opportunities to the development community within areas designated Mixed Use.*

Policy LU-3.6: Create focused, pedestrian-friendly neighborhoods that are reminiscent of the qualities found in earlier days, particularly within the original communities of Cucamonga, Alta Loma, and Etiwanda, and along Historic Route 66 (Foothill Boulevard).

Implementation Action: *Continue to identify, prioritize, and install streetscape and landscape amenities that provide pleasant and comfortable streets, enhance City identity, and promote walking.*

Policy LU-3.7: Encourage new development projects to build on vacant infill sites within a built-out area, and/or redevelop previously developed properties that are underutilized.

Implementation Action: *Develop specific economic strategies for commerce within the Focus Areas of Foothill Boulevard, South Haven Avenue, Southwest sections, and Southeast parts of the city.*

Policy LU-3.8: Implement land use patterns and policies that incorporate smart growth practices, including placement of higher densities near transit centers and along transit corridors, allowing mixed-use development, and encouraging and accommodating pedestrian movement.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined.*

Policy LU-3.9: Facilitate revitalization of aging commercial centers by working with property owners, developers, local businesses, and other community organizations to coordinate efforts.

Implementation Action: *Review and modify previously adopted Specific Plans and Community Plans to ensure that the plans remain consistent with updates to the General Plan and provide for standards for redevelopment or rehabilitation versus new development proposals.*

Policy LU-3.10: Reserve appropriate areas of land for institutional uses to ensure that necessary services are provided to all areas of the community, and to encourage the creation of job opportunities for Rancho Cucamonga residents.

Implementation Action: *Review and modify portions of the Development Code to discourage the intrusion of institutional uses within industrial/commercial districts, while*

identifying areas within other zoning districts that are appropriate for inclusion of institutional uses that serve residents.

Policy LU-3.11: New development should be permitted especially where it is logical to extend existing infrastructure improvements and includes housing of varied densities.

Implementation Action: *As part of the development approval process, require that developments provide their identified fair share of infrastructure improvements or funding for utilities, roads, parks, etc. Provide incentives or programs that encourage developers to extend or improve and/or connect to existing systems.*

GOAL LU-4: *Establish a pedestrian-friendly Foothill Boulevard corridor that facilitates transit use and provides a range of commercial destinations to serve both local and regional needs.*

Policy LU-4.1: Provide new mixed-use development opportunities along the Foothill Boulevard Corridor to allow residential, commercial, and civic uses, and to accommodate both transit and automobiles.

Implementation Action: *Review and modify the Foothill Boulevard Specific Plan to ensure that allowable land uses not only provide for, but encourage, a mix of residential, commercial, and civic uses that target all modes of transportation.*

Policy LU-4.2: Concentrate community- and regional-serving uses on Foothill Boulevard (east of Haven Avenue), providing a range of commercial, office, residential, restaurant, and entertainment-related uses.

Implementation Action: *Modify the Development Code as needed to ensure that zoning regulations allow the types of uses that would serve community and regional needs east of Haven Avenue.*

Policy LU-4.3: Focus neighborhood-serving uses on Foothill Boulevard (west of Haven Avenue), and encourage a range of commercial and residential uses.

Implementation Action: *Modify the Development Code as needed to ensure that zoning regulations allow the types of uses that would serve the smaller neighborhood needs west of Haven Avenue.*

Policy LU-4.4: Concentrate commercial uses near major intersections.

Implementation Action: *Review and modify the Foothill Boulevard Specific Plan as necessary to focus commercial development near the major intersections and allow residential uses along other portions of the corridor.*

Policy LU-4.5: Continue to reinforce the identity of the intersection of Foothill Boulevard and Haven Avenue by supporting development projects that are comparable to the quality of the Civic Center and County Courthouse complex, Terra Vista Town Center, and the adaptive re-use of the historic Virginia Dare Winery.

Implementation Action: *Establish clear public realm and private property improvements that are required for the intersection, either through a Specific Plan amendment or a zoning overlay.*

Policy LU-4.6: Accommodate land uses that support the activity centers envisioned in the Historic Cucamonga sector, as identified in the Foothill Boulevard Specific Plan.

Implementation Action: *Include the identification of significant Route 66 resources as part of the preparation of the updated historic survey. Amend zoning and/or land use exhibits to reflect the specific linear boundaries of Route 66 to include specific identified resource properties.*

GOAL LU-5: Support a regionally serving office district that provides professional and technical employment opportunities for the Inland Empire.

Policy LU-5.1: Create a central business hub at the intersection of Foothill Boulevard and Haven Avenue, extending south to 4th Street, with higher-intensity office, commercial, and public/quasi-public uses.

Implementation Action: *Review and modify the zoning classifications and/or development standards for properties at the intersection of Foothill Boulevard and Haven Avenue, including the reach southerly to 4th Street. Increase permitted floor-area ratios and building heights as necessary, and allow strategic shared parking arrangements.*

Policy LU-5.2: Encourage development along the Haven Avenue Corridor that incorporates appropriate intensity and design excellence for an important gateway to Rancho Cucamonga.

Implementation Action: *Review and update, as necessary, design guidelines for the Haven Avenue Corridor to ensure that the City's high standards for design are focused on the creation of the gateway.*

Policy LU-5.3: Promote the Haven Avenue Corridor as a distinctive, attractive, and pleasant office park atmosphere that caters to professional, technological, and similar businesses in a campus-like setting with a prestigious identity.

Implementation Action: *Review and update, as necessary, design guidelines for the Haven Avenue Corridor to ensure that the City's high standards for design are focused on the creation of the gateway.*

Policy LU-5.4: Promote a pedestrian-friendly corridor where employees can walk to restaurants, commercial services, and other amenities in the area.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.5: Require development to provide courtyards and plazas, public art, and landscaped open spaces that promote safe and convenient pedestrian movement with continuous landscaped pathways between buildings and along Haven Avenue.

Implementation Action: *Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future.*

Policy LU-5.6: Support the integration of transportation facilities, including transit, to support the office environment.

Implementation Action: Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project.

GOAL LU-6: Promote the stability of southwest Rancho Cucamonga residential neighborhoods.

Policy LU-6.1: Continue to encourage commercial and community services that meet community needs.

Implementation Action: Identify and implement economic development incentives that can increase the availability of commercial businesses to serve neighborhoods within the Southwest focus area, particularly on infill properties.

Policy LU-6.2: Minimize impacts of industrial development and truck traffic in residential areas or on residential streets.

Implementation Action: Target enforcement of existing codes and regulations to minimize impacts from industrial uses in proximity to residential neighborhoods, including enforcement of truck routes.

Policy LU-6.3: Protect and preserve historical sites that reflect the area's long-standing agricultural heritage.

Implementation Action: Develop an ordinance or ordinance amendment to adopt the use of the Williamson Act to preserve local agricultural heritage sites. Through the development review process, encourage incorporation of historic landscape features such as vineyards, fruit trees, and windbreaks into new development projects. Investigate issues and formulate a strategy that will best reflect the long-term interests of the community as a whole. Where it is determined that long-term agricultural use is in conflict with community goals, seek the removal of any designated farmlands from the State Department of Conservation mapping program.

Policy LU-6.4: Support infrastructure improvements that encourage investment in southwest Rancho Cucamonga.

Implementation Action: Inventory infrastructure needs in the southwest portion of the City to determine a maintenance/rehabilitation program to be incorporated into future CIPs.

Policy LU-6.5: Encourage the re-use and rehabilitation of historic or high-quality existing buildings.

Implementation Action: Develop an ordinance or ordinance amendment to allow for relief from certain development standards (height, setbacks, parking, etc.) for projects involving the rehabilitation of historic resources. Develop an ordinance or ordinance amendment that presents a range of possible incentives for development projects with adaptive reuse of historic resources.

GOAL LU-7: Encourage diverse employment-generating land uses that are clean and modern, and that incorporate green technologies.

Policy LU-7.1: Concentrate heavy industrial and utility-related uses in the area immediately surrounding the electrical power plant.

Implementation Action: *Continue economic development programs for business retention of existing heavy industrial users.*

Policy LU-7.2: Support infrastructure improvements to attract light industrial and manufacturing uses, green technology uses, energy-related businesses, and research and development uses.

Implementation Action: *Inventory infrastructure conditions in the City's industrial districts, including telecommunications infrastructure, to determine where improvements are required to address the needs of high-end industrial users. Interview potential businesses to identify their specific needs. Plan for improvements as part of the CIP process.*

Policy LU-7.3: Support public and quasi-public uses in southeast Rancho Cucamonga that are complementary to heavy industrial land uses.

Implementation Action: *Promote the ability of the City to accommodate green industries and public/private partnerships engaged in renewable energy production and materials reuse and recycling.*

GOAL LU-8: Encourage visually attractive hillsides where the natural environment is protected, a sustainable level of development is ensured, and appropriate measures to protect against hazards are in place.

Policy LU-8.1: Regulate development on natural slopes of eight percent grade or greater through the City's Hillside Development Ordinance.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

Policy LU-8.2: Approve only those residential densities that do not exceed the capacity of the land or the ability to reasonably provide public services and adequate public safety.

Implementation Action: *Continue to utilize the adopted hillside regulations to limit residential densities.*

Policy LU-8.3: Require adequate access for emergency vehicles and evacuations.

Implementation Action: *Continue to coordinate the review of development proposals within hillside areas with emergency personnel.*

Policy LU-8.4: Prohibit extensive disturbances and scarring of ridgelines and other distinctive landforms in the hillsides.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

Policy LU-8.5: Protect natural resources and sensitive habitat areas, and avoid encroachment from new hillside development.

Implementation Action: *Continue to coordinate the review of hillside development proposals with Federal, State, and regional agencies with purview over natural resources and sensitive habitats.*

Policy LU-8.6: Require that hillside development minimize alteration of natural landforms, and encourage clustering where feasible to retain maximum open space.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

Policy LU-8.7: Blend hillside development with the natural surroundings through architecture and the use of appropriate construction materials, colors, and natural vegetation.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

Policy LU-8.8: Provide conveniently located places to experience nature in the northerly reaches of the Planning Area, particularly through trail extensions and educational programs.

Implementation Action: *As open space areas within the City's Sphere are incorporated, the trails systems within this area should be expanded, designed for educational experiences, and dedicated for public use.*

Policy LU-8.9: Restrict intensive uses and activities in areas where they would be threatened by natural or man-made hazards.

Implementation Action: *Continue to require development proposals within areas prone to flooding and high fire hazards to provide technical reports and assessments of risks, and to identify appropriate mitigation, limitations, or boundaries for such development.*

Policy LU-8.10: Hillside development shall be controlled by customized regulations.

Implementation Action: *Continue to apply adopted standards to development within the hillsides, and update those standards as needed to reflect current industry standards as they may change.*

4.10.5 STANDARD CONDITIONS OF APPROVAL

The regulation of land use and development is the jurisdiction of the local authority. Compliance with pertinent regulations and programs will be required for all new development and redevelopment in the City. These include those standard conditions of approval (SCs) listed below.

SC 4.10-1 As the primary land use policy document for the City, the Rancho Cucamonga General Plan regulates all future development and redevelopment in the City. All

future development projects must be consistent with the goals, policies and programs of the 2010 General Plan Update, as amended.

- SC 4.10-2** The City's Development Code provides development standards and design guidelines for the development or redevelopment of individual parcels in the City. Future development and redevelopment projects shall be required to comply with pertinent zoning regulations.

4.10.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment in the City pursuant to the proposed 2010 General Plan Update would lead to the conversion of vacant and undeveloped land to urban land uses and the redevelopment of underutilized lots, which may lead to changes in land use and/or development density/intensity. Tables 3-3 through 3-5 in Section 3.0, Project Description, summarize total acreage and square footage figures by land use designation based on buildout of the Land Use Plan in the proposed 2010 General Plan Update. As discussed in Section 3.0, Project Description, the development capacity projected for the proposed 2010 General Plan Update is based upon assumed levels of development for all land use categories. The City has not assumed that all properties will be developed at the maximum densities and intensities stated for each land use category. Rather, anticipated densities and intensities have been assumed. In the build out summary tables, these anticipated densities and intensities yield the total "target" dwelling units and probable non-residential square footage, which are based on actual density and intensity levels derived from development applications. Also, many properties are already developed at densities and intensities lower than those permitted by the General Plan, and the City anticipates that over the 15- to 20-year horizon period of the General Plan, the majority of properties citywide will not redevelop. Because actual development has the potential to exceed the target densities which are analyzed in this PEIR, MM 4.10-1 shall be applied to all future developments to ensure that development beyond the target densities is adequately analyzed pursuant to CEQA.

Established Communities

Threshold 4.10a: Would the proposed General Plan Update physically divide an established community?

The City of Rancho Cucamonga is developed with a number of residential neighborhoods, largely located north of Foothill Boulevard, and with a residential neighborhood in the City's southwestern section. These residential uses are planned for retention and preservation in the proposed 2010 General Plan Update, and they are designated with various residential designations in the Land Use Plan. Also, the assigned allowable densities in these residential areas reflect existing developed densities. Thus, no change in land use or redevelopment to higher densities is expected to occur in these neighborhoods.

Goals LU-1 and LU-6 and their supporting policies promulgate these patterns. Other goals and policies in the Managing Land Use, Community Design and Historic Resources Chapter call for (1) the development of infill vacant lots (Goal LU-2 and supporting policies); (2) development to support residential uses (Goal LU-2, Goal LU-4 and supporting policies); and (3) the revitalization of older developments (Policy LU-3.9), rather than changing existing developments that would lead to community division. Thus, no division of these residential communities would result with implementation of the proposed 2010 General Plan Update.

Future development would occur on scattered vacant lands throughout the City. The individual development of these small infill lots would reflect the surrounding and planned land uses and

would not be expected to lead to the division of established neighborhoods in Rancho Cucamonga. Future development in the SOI would be located where limited residential development already exists.

As shown in Tables 3-3 through 3-5 in Section 3.0, Project Description, approximately 63,253 dwelling units, 203,800 residents, and approximately 99.8 million additional square feet of new non-residential development is expected in the City and its SOI; additionally, 103,040 jobs are anticipated from buildout of the proposed 2010 General Plan Update. A net increase of 7,584 new dwelling units, 19.77 million square feet of non-residential development, and 103,040 new jobs would occur at buildout. Areas where redevelopment and new development are expected include:

- The Foothill Boulevard commercial corridor, where commercial and mixed-use developments are encouraged;
- The South Haven Avenue office corridor, where office parks, commercial uses, and a central business hub are planned;
- The southwest area, where development of limited new commercial and community services are needed to serve adjacent residential areas;
- The southeast industrial area, where heavy industrial uses are planned, away from conflicting uses; and
- Hillside areas, where limited development works to avoid hazards and preserve visual resources and sensitive habitat.

Future development and redevelopment will be focused in mixed-use areas. Redevelopment of these areas is encouraged to create new opportunities and revitalize districts, not divide established communities. Impacts associated with changes in existing land uses would be less than significant; no mitigation is required.

Impact 4.10a: Implementation of the proposed 2010 General Plan Update would lead to changes in existing land uses on scattered lots in the City through the development of vacant lots and the redevelopment of underutilized parcels. However, the proposed 2010 General Plan Update calls for the preservation of the established residential neighborhoods and the majority of existing developments in the Land Use Plan. No established communities will be divided by the proposed 2010 General Plan Update or future development and redevelopment under the proposed 2010 General Plan Update. Impacts would be less than significant; no mitigation is required.

Plan Consistency

Threshold 4.10b: **Would the proposed General Plan Update conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

As discussed above, there are a number of regional and local land use planning documents and programs that apply to the City. The proposed 2010 General Plan Update's consistency with these plans is discussed below.

Rancho Cucamonga General Plan

Approval and implementation of the proposed 2010 General Plan Update will refine established General Plan goals and policies. New goals, policies and programs are included in the proposed 2010 General Plan Update, and a new Land Use Plan is proposed. However, many of the goals and policies in the current General Plan are carried forward into the proposed 2010 General Plan Update, reflecting the City's continued commitment to established values and vision. Added goals and policies are refinements that address new issues that have become a concern since the 2001 update or minor changes that reflect changes in the way the City will address the same concerns.

Comparison of the current and proposed Land Use Plans shows that the majority of land use designations remain the same. As discussed in Section 3.0, Project Description, the proposed changes do not include increases in development density, except for the areas where a designation change is proposed.

Also, while the designations would change for some areas within the City and SOI, the proposed 2010 General Plan Update (once adopted) will supersede the current General Plan; therefore, no conflict would occur. All future development projects shall be consistent with the goals, policies, and programs of the 2010 General Plan Update (SC 4.10-1).

Implementation of MM 4.10-1 would ensure that the maximum buildout of the 2010 General Plan Update Study Area as analyzed in this PEIR would not occur.

Development Code

Whereas the General Plan is a policy document that sets forth direction for development decisions, the City's Development Code is a regulatory document that establishes specific standards for the use and development of all properties in the City. The Development Code regulates development intensity using a variety of methods, such as setting limits on building setbacks, yard landscaping standards, and building heights. The Code also specifies which land uses are permitted in the various zone districts.

Table 4.10-2 illustrates the consistency between the 2010 General Plan Update Land Use Designations and City's Development Districts.

**TABLE 4.10-2
GENERAL PLAN LAND USE DESIGNATIONS AND DEVELOPMENT
DISTRICT CONSISTENCY**

Land Use Designation	Development Districts
Residential	
Very Low	VL – Very Low
Low	L – Low
Low Medium	LM – Low Medium
Medium	M – Medium
Medium High	MH – Medium High
High	H – High
Commercial	
Office	OP – Office and Professional
Neighborhood Commercial	NC – Neighborhood Commercial
Community Commercial	GC – General Commercial
General Commercial	
Mixed Use	
Mixed Use	SP – Specific Plan Districts PC – Planned Community Districts
Industrial	
Industrial Park	IP – Industrial Park
General Industrial	GI – General Industrial
Heavy Industrial	HI/RS – Heavy Industrial/Rail-Served
Open Space	
Hillside Residential	HR – Hillside Residential District
Conservation	OS – Open Space
Open Space	
Flood Control/Utility Corridor	FC – Flood Control UC – Utility Corridor
Public Facility	
Civic/Regional	All Zoning Districts
Schools	All Zoning Districts
Parks	All Zoning Districts
Source: Land Use, Community Design and Historic Resources Chapter, 2009.	

As shown, the Land Use Designations have a corresponding Development District; public facilities are allowed in all districts. The Development Code also includes overlay districts that provide additional regulations for development to address the unique needs or characteristics of particular areas.

Within the Development Code, the City has adopted several Specific Plans and Planned Communities that provide flexibility in regulating development within established areas. These Specific Plans and Planned Communities are listed in Table 4.10-3.

**TABLE 4.10-3
ADOPTED SPECIFIC PLANS AND PLANNED COMMUNITIES**

Name	Acreage	Date Adopted
Industrial Area Specific Plan	5,000	1981
Sub-Area 18 Specific Plan (Empire Lakes)	380	1994
Foothill Boulevard Specific Plan	560	1987
Etiwanda North Specific Plan	6,850	1992
Etiwanda Specific Plan	3,000	1983
Victoria Community Plan	2,150	1981
Terra Vista Community Plan	1,321	1983
Caryn Planned Community Development Plan	244	1986
Source: Land Use, Community Design and Historic Resources Chapter, 2009.		

The land uses set forth in these Specific Plans and Planned Communities are reflected in the proposed Land Use Plan and thus are consistent with the Development Code and the proposed 2010 General Plan Update.

Rancho Redevelopment Project

The Rancho Redevelopment Project calls for development and redevelopment within a defined “Project Area” (at the City’s southeastern section) in accordance with the 2010 General Plan Update and applicable regulations. Thus, no conflict with the Redevelopment Project would occur with adoption of the proposed 2010 General Plan Update.

SCAG Regional Planning Programs

The Compass Blueprint program addresses regional issues, and the proposed 2010 General Plan Update’s consistency with the principles and strategies of the Compass Blueprint are discussed below.

Compass Principles:

- ***Improve Mobility for All Residents.*** The Community Mobility Chapter of the proposed 2010 General Plan Update addresses the mobility needs of the City, including a transportation system that will provide for integration of all transportation modes.
- ***Foster Livability in All Communities.*** The Land Use, Community Design and Historic Resources Chapter of the proposed 2010 General Plan Update promotes the preservation of stable residential neighborhoods in City, along with the development of supporting infrastructure and land uses.
- ***Enable Prosperity for All People.*** The Economic Development Chapter of the proposed 2010 General Plan Update plans for the continued economic stability of the City and its residents.
- ***Promote Sustainability for Future Generations.*** The Resource Conservation Chapter of the proposed 2010 General Plan Update addresses Open Space Resources, Mineral Resources, Agricultural and Cultural Resources, Water Resources, Energy Resources, Green Buildings, and Wildlife Resources as they relate to quality of life and sustainability issues.

The proposed 2010 General Plan Update reflects each principle of the Compass Blueprint program as follows:

Compass Strategies:

- **Focusing growth in existing and emerging centers and along major transportation corridors.** The Land Use, Community Design and Historic Resources Chapter of the proposed 2010 General Plan Update assumes that future development and redevelopment would be focused along the Foothill Boulevard commercial corridor and the South Haven Avenue office corridor (which are major transportation corridors) and in the Southwest and Southeast industrial areas (which are emerging centers).
- **Creating significant areas of mixed-use development and walkable communities.** The Mixed Use designation is intended to create walkable communities in the following areas: Victoria Gardens; Town Center at Haven Avenue and Foothill Boulevard; Terra Vista; Foothill Boulevard at Hermosa Avenue and Center Avenue; Foothill Boulevard at Archibald Avenue and Hellman Street; Foothill Boulevard at Helms Avenue and Hampshire Street; Mayten Avenue between Foothill Boulevard and Church Street; Empire Lakes (Industrial Specific Plan Sub Area – 18); Foothill Boulevard at Deer Creek Channel; Haven Avenue and Church Street; Bear Gulch; Foothill Boulevard at the Cucamonga Creek Channel; and the Alta Loma Historic District.
- **Targeting growth around existing and planned transit stations.** The Metrolink station is located within the Empire Lakes mixed use area. More intensive development is allowed around major corridors (Foothill Boulevard, Haven Avenue, Vineyard Avenue, Base Line Road, Arrow Highway, Milliken Avenue) and destinations (Chaffey College and Victoria Gardens) where bus transit is available and Bus Rapid Transit is planned.
- **Preserving existing open space and stable residential areas.** The proposed Land Use Plan preserves the City's residential areas, where no land use changes are proposed or expected. Also, open space areas (Hillside Residential, Conservation, Open Space and Flood Control/Utility Corridor) are designated to have limited or no development to protect them from urban development.

In addition to the Compass strategies, the following "Regional Growth Principles" from the 2004 Compass Blueprint Growth Vision Report provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Table 4.10-4 identifies applicable principles and states how the proposed 2010 General Plan Update will support these principles.

**TABLE 4.10-4
2004 COMPASS BLUEPRINT GROWTH VISION
REPORT CONSISTENCY TABLE**

Principle	Proposed 2010 General Plan Update Consistency
Principle 1: Improve mobility for all residents	
GV P1.1: Encourage transportation investments and land use decisions that are mutually supportive.	Consistent: One strategy of the Community Mobility Chapter is to connect transportation and land use.
GV P1.2: Locate new housing near existing jobs and new jobs near existing housing.	Consistent: Goal LU-3 of the Land Use, Community Design, and Historic Resources Chapter calls for the creation of (1) a healthy balance of jobs and housing in the City and (2) opportunities for people to live close to work or near transit stops so that it is possible for residents to walk to neighborhood stores and parks, to enjoy indoor and outdoor entertainment close to home, and to experience exciting pedestrian districts.
GV P1.3: Encourage transit-oriented development.	Consistent: The Community Mobility Chapter's Transit Plan promotes the improvement of transit systems along major corridors in the City.
GV P1.4: Promote a variety of travel choices.	Consistent: Goal CM-1 of the Community Mobility Chapter calls for an integrated and balanced multi-modal transportation network.
Principle 2: Foster livability in all communities	
GV P2.1: Promote infill development and redevelopment to revitalize existing communities.	Consistent: Supporting policies under Goal LU-9 of the Land Use, Community Design, and Historic Resources Chapter seek to revitalize areas through redevelopment and infill development.
GV P2.2: Promote developments that provide a mix of uses.	Consistent: The Land Use Plan in the Land Use, Community Design, and Historic Resources Chapter includes a Mixed Use designation, which applies to 626 acres in the City.
GV P2.3: Promote "people scaled," pedestrian-friendly (walkable) communities.	Consistent: The Community Mobility Chapter addresses walkability improvements and pedestrian amenities.
GV P2.4: Support the preservation of stable, single-family neighborhoods.	Consistent: Goal LU-1 of the Land Use, Community Design, and Historic Resources Chapter calls for the preservation and protection of established residential neighborhoods.
Principle 3: Enable prosperity for all people	
GV P3.1: Provide, in each community, a variety of housing types in each community to meet the housing needs of all income levels.	Consistent: The Land Use Plan in the Land Use, Community Design, and Historic Resources Chapter includes 6 Residential designations that allow for varying densities, plus a Mixed Use designation and an Open Space designation that allow residential development.
GV P3.2: Support educational opportunities that promote balanced growth.	Consistent: Goals PF-1 and PF-2 of the Public Facilities and Infrastructure Chapter call for the provision of state-of-the-art public and community facilities that support existing programs and improved access to educational opportunities.
GV P3.3: Ensure environmental justice regardless of race, ethnicity or income class.	Consistent: The proposed 2010 General Plan Update promotes equality by addressing the needs of all residents, regardless of race, ethnicity, or income class.
GV P3.4: Support local and State fiscal policies that encourage balanced growth.	Consistent: The Economic Development Chapter promotes the long-term fiscal sustainability of the City through a diverse and multi-focused local economy.
GV P3.5: Encourage civic engagement.	Consistent: Goal CS-5 of the Community Services Chapter calls for on-going support of all community services programs and activities through fundraising, volunteering, and partnerships.

TABLE 4.10-4 (Continued)
2004 COMPASS BLUEPRINT GROWTH VISION
REPORT CONSISTENCY TABLE

Principle	Proposed 2010 General Plan Update Consistency
Principle 4: Promote sustainability for future generations	
GV P4.1: Preserve rural, agricultural, recreational and environmentally sensitive areas.	Consistent: The Resource Conservation Chapter calls for the preservation of natural open space areas and environmentally sensitive lands, such as the hillsides and areas with water, mineral, and wildlife resources.
GV P4.2: Focus development in urban centers and existing cities.	Consistent: The Land Use Plan in the Land Use, Community Design, and Historic Resources Chapter allows higher intensity development in urban centers and limits development in the hillsides and environmentally sensitive areas.
GV P4.3: Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.	Consistent: The Land Use Plan in the Land Use, Community Design, and Historic Resources Chapter identifies areas where future development may occur. The Public Health and Safety Chapter calls for pollution reduction. The Public Facilities and Infrastructure Chapter address waste management and recycling.
GV P4.4: Utilize “green” development techniques.	Consistent: The Resource Conservation Chapter promotes the use of green building strategies.

The proposed 2010 General Plan Update implements the same strategies as the Compass Blueprint program. No conflict with the Compass Blueprint program is expected with the proposed 2010 General Plan Update.

SCAG’s RCP uses the same guiding principles as the Compass Blueprint program, and the proposed 2010 General Plan Update is consistent with it, as discussed above. The RCP seeks to better accommodate growth in the region; protect the environment; and ensure economic competitiveness. Rancho Cucamonga’s proposed 2010 General Plan Update would accommodate growth in the City through developing vacant lots and redeveloping older areas. The proposed 2010 General Plan Update’s Resource Conservation Chapter protects the environment and resources in the City, and the Economic Development Chapter promotes economic stability. Thus, the proposed 2010 General Plan Update is consistent with the overall goals of the RCP.

The RCP also identifies SCAG best practices, voluntary local government best practices, voluntary project sponsor and developer best practices, Federal and State policies, SCAG initiatives, and Federal and State government strategies that would help implement the RCP.

Recommended local government programs or actions are listed in Table 4.10-5, along with the proposed 2010 General Plan Update’s consistency with the constrained policies and strategic initiatives in the RCP.

**TABLE 4.10-5
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN**

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
Land Use and Housing	
LU-4: Local governments should provide for new housing, consistent with State Housing Chapter law, to accommodate their share of forecast regional growth.	The Housing Element of the General Plan provides adequate sites for new housing development, in accordance with forecasted growth. As many as 7,584 new units are projected at buildout under the proposed Land Use Plan.
LU-4.1: Local governments should adopt and implement General Plan Housing Chapters that accommodate housing needs identified through the Regional Housing Needs Assessment (RHNA) process. Affordable housing should be provided consistent with RHNA income category distributions adopted for each jurisdiction. To provide housing, especially affordable housing, jurisdictions should leverage existing State programs such as HCD's Workforce Incentive Program and density bonus law and create local incentives (e.g., housing trust funds, inclusionary zoning, tax-increment-financing districts in redevelopment areas and transit villages) and partnerships with non-governmental stakeholders.	The Housing Element provides sites and programs to accommodate the City's RHNA allocation.
LU-5: Local governments should leverage Federal and State and local funds to implement the Compass Blueprint.	The proposed 2010 General Plan Update implements the guiding principles and strategies of the Compass Blueprint program.
LU-5.1: All stakeholders should leverage State infrastructure bond financing, including the Department of Housing and Community Development's Transit Oriented Development program and should support legislation that will target infrastructure bond funds for regions with adopted growth visions such as the Compass Blueprint and for projects consistent with these visions.	The proposed 2010 General Plan Update is consistent with the Compass Blueprint program, but does not specifically address infrastructure bond financing.
LU-5.2: Subregional organizations should leverage the Federal transportation planning funds available at the subregional level, to complete projects that integrate land use and transportation planning and implement Compass Blueprint principles.	The proposed 2010 General Plan Update is consistent with the Compass Blueprint program, but does not specifically address Federal planning funds.
LU-6: Local governments should consider shared regional priorities, as outlined in the Compass Blueprint, Regional Transportation Plan, and this Regional Comprehensive Plan, in determining their own development goals and drafting local plans.	The proposed 2010 General Plan Update implements the guiding principles and strategies of the Compass Blueprint program.
LU-6.1: Local governments should take a comprehensive approach to updating their General Plans, keeping General Plans up-to-date and providing progress reports on updates and implementation, as required by law.	The proposed 2010 General Plan Update is a comprehensive review and revision of the Rancho Cucamonga General Plan.
LU-6.2: Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program.	Sustainable principles are incorporated into the 2010 General Plan Update, especially the Resource Conservation Chapter.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
LU-6.3: Local governments and subregional organizations should develop ordinances and other programs, particularly in the older, more urbanized parts of the region, which will enable and assist in the cleanup and redevelopment of brownfield sites.	The proposed 2010 General Plan Update does not specifically address brownfield sites in the City.
LU-6.4: Local governments and subregional organizations should develop adaptive reuse ordinances and other programs that will enable the conversion of vacant or aging commercial, office, and some industrial properties to housing and mixed-use with housing.	The proposed Land Use Plan promotes the redevelopment of the older areas of the City and includes a Mixed Use designation.
Open Space and Habitat	
OSN-12: Local governments should track and monitor open space conservation by considering the most recent annual report on open space conservation in planning and evaluating projects and programs in areas with regionally significant open space resources and ensuring consistency with the open space conservation policies and goals of the RCP.	There are no potential conservation areas in or near the City, as identified by the RCP. The proposed Land Use Plan includes Conservation, Hillside Residential, Flood Control/Utility Corridor, and Open Space areas where no or limited development is anticipated.
OSN-13: Local governments should develop and implement mitigation for open space impacts by promoting coordinated mitigation programs for regional projects and establish the basis for inter regional conservation strategies and planning development in locations least likely to cause environmental impact.	The proposed Land Use Plan does not authorize development in areas designated as Flood Control/Utility Corridor and Conservation, with limited development allowed in areas designated as Open Space and Hillside Residential.
OSC-7: Local governments should prepare a Needs Assessment to determine the adequate community open space level for their areas.	The Community Services Chapter addresses the City's needs for parks and recreational facilities.
OSC-8: Local governments should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities.	The proposed Land Use Plan concentrates development in areas with developed roadways and infrastructure systems.
OSC-9: Developers and local governments should increase the accessibility to natural areas lands for outdoor recreation.	The Community Services Chapter discusses existing parks, and the Resource Conservation Chapter addresses open space available in the City, which includes the natural areas of the San Bernardino National Forest to the north.
OSC-10: Developers and local governments should promote infill development and redevelopment to revitalize existing communities.	The proposed Land Use Plan provides for new development and redevelopment on infill vacant lots and underutilized lots in the City.
OSC-11: Developers should incorporate and local governments should include land use principles, such as green building, that use resources efficiently, eliminate pollution and significantly reduce waste into their projects, zoning codes and other implementation mechanisms.	Sustainable principles are incorporated into the proposed 2010 General Plan Update, especially the Resource Conservation Chapter.
OSC-12: Developers and local governments should promote water-efficient land use and development.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation.
OSC-13: Developers and local governments should encourage multiple use spaces and encourage redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.	The Community Services Chapter discusses existing parks, and the Resource Conservation Chapter addresses open space available in the City, which includes the natural areas of the San Bernardino National Forest to the north.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
<p>OSA-5: Promote the availability of locally grown and organic food in the region. Local governments should establish transfer of development rights (TDR) programs to direct growth to less agriculturally valuable lands (while considering the potential effects at the sites receiving the transfer) and ensure the continued protection of the most agriculturally valuable land within each county through the purchase of the development rights for these lands.</p> <p>Local governments should consider other tools for the preservation of agricultural lands such as eliminating estates and ranchettes and clustering to retain productive agricultural land.</p> <p>Local governments should ease restrictions on farmer's markets and encourage cooperative farming initiatives to increase the availability of locally grown food.</p> <p>Local governments should consider partnering with school districts to develop farm-to-school programs.</p>	<p>The proposed 2010 General Plan Update includes a goal for the stewardship of agricultural resources and a policy for the evaluation of the conservation of economically viable agriculture on lands. The City is expected to investigate ways to preserve agricultural lands through the use of conservation easements and to formulate a strategy that will best reflect the long-term interests of the City.</p>
<p>OSA-6: Local governments are encouraged to obtain assistance from the American Farmland Trust in developing and implementing farmland conservation measures or avoid impacts to important farmlands.</p>	<p>The proposed 2010 General Plan Update includes a goal for the stewardship of agricultural resources and a policy for the evaluation of the conservation of economically viable agriculture on lands.</p>
<p>OSA-7: Local governments should avoid the premature conversion of farmlands by promoting infill development and the continuation of agricultural uses until urban development is imminent; if development of agricultural lands is necessary, growth should be directed to those lands on which the continued viability of agricultural production has been compromised by surrounding urban development or the loss of local markets.</p>	<p>The City's Development Code does not have an agricultural zone, although agricultural uses are allowed as an interim use on lots 2.5 acres or more within the Residential Development Districts.</p>
Water	
<p>WA-9: Developers and local governments should consider potential climate change hydrology and resultant impacts on available water supplies and reliability in the process of creating or modifying systems to manage water resources for both year-round use and ecosystem health.</p>	<p>The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. The Public Facilities and Infrastructure Chapter addresses water services to existing and future development.</p>
<p>WA-10: Developers and local governments should include conjunctive use as a water management strategy when feasible.</p>	<p>The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. The Public Facilities and Infrastructure Chapter addresses water services to existing and future development. The City's water supplies come from local canyon surface runoff water, groundwater, and imported water.</p>
<p>WA-11: Developers and local governments should encourage urban development and land uses to make greater use of existing and upgraded facilities prior to incurring new infrastructure costs.</p>	<p>The proposed Land Use Plan concentrates development in areas with developed roadways and infrastructure systems.</p>
<p>WA-12: Developers and local governments should reduce exterior uses of water in public areas, and should promote reduced use in private homes and businesses, by shifting to drought-tolerant native landscape plants (xeriscaping), using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives.</p>	<p>The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. The Public Facilities and Infrastructure Chapter addresses water services to existing and future development. Additionally, compliance with the City's Water Efficient Landscaping Ordinance would reduce exterior water use.</p>

**TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN**

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
WA-13: Developers and local governments should protect and preserve vital land resources - wetlands, groundwater recharge areas, woodlands, riparian corridors, and production lands. The Federal government's 'no net loss' wetlands policy should be applied to all of these land resources.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation.
WA-14: Local governments should amend building codes to require dual plumbing in new construction, and provide incentives for plumbing retrofits in existing development, to enable the safe and easy use of recycled water in toilets and for landscaping.	The Resource Conservation Chapter calls for an expanded recycled water distribution system and greater use of recycled water in the City.
WA-15: Local governments should amend ordinances as necessary to allow municipal and private outdoor use of recycled water for all parks, golf courses, and outdoor construction needs.	The Resource Conservation Chapter calls for an expanded recycled water distribution system and greater use of recycled water in the City.
WA-16: Water agencies should incentivize the use of recycled water through pricing structures that make it an attractive alternative to fresh water in non-potable situations.	Since the City is not a water agency, this policy is not applicable to the proposed 2010 General Plan Update.
WA-17: Water agencies should reduce salinity and remove contamination in major groundwater basins to increase conjunctive use of water resources and extend groundwater storage unless specific beneficial uses for contaminated groundwater are identified.	Since the City is not a water agency, this policy is not applicable to the proposed 2010 General Plan Update.
WA-18: Local governments should create stable sources of funding for water and environmental stewardship and related infrastructure sustainability, including purchase and implementation of green infrastructure.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. The Public Facilities and Infrastructure Chapter addresses water services to existing and future development.
WA-19: Water purveyors should develop and implement tiered water pricing structures to discourage water waste and minimize polluting runoff.	Since the City is not a water purveyor, this policy is not applicable to the proposed 2010 General Plan Update.
WA-20: Local governments should use both market and regulatory incentive mechanisms to encourage 'water wise' planning and development, including streamlining and prioritizing projects that minimize water demand and improve water use efficiencies.	The Resources Sustainability Chapter promotes the protection of water quality and water resource conservation.
WA-21: Local governments should develop comprehensive partnership approaches to remove and prevent water impairments, replacing the existing regulatory command and control approach that has created delays and distrust.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation.
WA-22: Local governments should create opportunities for pollution reduction marketing and other market-incentive water quality programs.	The Resource Conservation Chapter promotes the protection of water quality.
WA-23: Local governments should encourage Low Impact Development and natural spaces that reduce, treat, infiltrate and manage runoff flows caused by storms and impervious surfaces.	The proposed Land Use Plan calls for limited development in the SOI's hillsides and canyon areas.
WA-24: Local governments should prevent development in flood hazard areas lacking appropriate protections, especially in alluvial fan areas.	The proposed Land Use Plan includes a Flood Control/Utility Corridor designation where no development is allowed.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
WA-25: Local governments should implement green infrastructure and water-related green building practices through incentives and ordinances.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. Policy PS-11.5 of the Public Health and Safety Chapter calls for green building incentives to increase water efficiency in buildings.
WA-26: Local governments should integrate water resources planning with existing greening and revitalization initiatives, such as street greening, tree planting, and conversion of impervious surfaces, to maximize benefits and share costs.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation. Policy PS-11.7 of the Public Health and Safety Chapter supports tree planting, planting more vegetation (including native and drought-resistant planting), and preserving open space.
WA- 27: Developers and local governments should maximize pervious surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation.
WA-28: Local governments should maintain and update Best Management Practices for water resource planning and implementation.	The Resource Conservation Chapter promotes the protection of water quality and water resource conservation.
WA-29: Local governments should coordinate with neighboring communities and watershed stakeholders to identify potential collaborative mitigation strategies at the watershed level to properly manage cumulative impacts within the watershed.	The City is not a water purveyor; however, policies in the Resource Conservation Chapter call for consultation with the Cucamonga Valley Water District and other agencies on water issues.
WA-30: Local governments should adopt MOUs and JPAs among local entities to establish participation in the leadership and governance of integrated watershed planning and implementation.	The City is not a water purveyor; however, policies in the Resource Conservation and Public Facilities and Infrastructure Chapters call for consultation with the Cucamonga Valley Water District and other agencies on water issues.
WA-31: Local governments should increase participation in the implementation of integrated watershed management plans, including planning effort initiated in neighboring communities that cross jurisdictional lines.	The City is not a water purveyor; however, policies in the Resource Conservation and Public Facilities and Infrastructure Chapters call for consultation with the Cucamonga Valley Water District and other agencies on water issues.
WA-32: Developers and local governments should pursue water management practices that avoid energy waste and create energy savings/supplies.	The Resource Conservation and Public Facilities and Infrastructure Chapters address water services, water resource conservation, energy conservation, wastewater collection, storm drainage, and waste management.
Energy	
<p>EN-8: Developers and local governments should incorporate the following land use principles that use resources efficiently, eliminate pollution and significantly reduce waste into their projects, zoning codes and other implementation mechanisms:</p> <ul style="list-style-type: none"> • Mixed-use residential and commercial development that is connected with public transportation and utilizes existing infrastructure. • Land use and planning strategies to increase biking and walking trips. 	The proposed Land Use Plan has a Mixed Use designation that promotes the development of walkable communities, and the Public Health and Safety Chapter includes policies to encourage mixed uses development and the use of alternative transportation systems.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
<p>EN-9: Local governments should include energy analyses in environmental documentation and general plans with the goal of conserving energy through the wise and efficient use of energy. For any identified energy impacts, appropriate mitigation measures should be developed and monitored. SCAG recommends the use of Appendix F, Energy Conservation, of the California Environmental Quality Act.</p>	<p>The Resource Conservation Chapter addresses energy conservation, and this EIR addresses electrical power and natural gas impacts in Section 4.17, Utilities and Service Systems.</p>
<p>EN-10: Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Energy saving measures that should be explored for new and remodeled buildings include:</p> <ul style="list-style-type: none"> • Using energy efficient materials in building design, construction, rehabilitation, and retrofit • Encouraging new development to exceed Title 24 energy efficiency requirements. • Developing Cool Communities measures including tree planting and light-colored roofs. These measures focus on reducing ambient heat, which reduces energy consumption related to air conditioning and other cooling equipment. • Utilizing efficient commercial/residential space and water heaters: This could include the advertisement of existing and/or development of additional incentives for energy efficient appliance purchases to reduce excess energy use and save money. Federal tax incentives are provided online at: http://www.energystar.gov/index.cfm?c=Products.pr_tax_credits. • Encouraging landscaping that requires no additional irrigation: utilizing native, drought tolerant plants can reduce water usage up to 60 percent compared to traditional lawns. • Encouraging combined heating and cooling (CHP), also known as cogeneration, in all buildings. • Encouraging neighborhood energy systems, which allow communities to generate their own electricity • Orienting streets and buildings for best solar access. • Encouraging buildings to obtain at least 20% of their electric load from renewable energy. 	<p>The Resource Conservation Chapter promotes green building practices under Goal RC-6 and its supporting policies, which call for adding energy efficiency standards in the City's Municipal Code.</p>
<p>EN-11: Developers and local governments should submit projected electricity and natural gas demand calculations to the local electricity or natural gas provider, for any project anticipated to require substantial utility consumption. Any infrastructure improvements necessary for project construction should be completed according to the specifications of the energy provider.</p>	<p>Coordination with local electricity or natural gas providers is part of the development process.</p>

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
EN-12: Developers and local governments should encourage that new buildings are able to incorporate solar panels in roofing and tap other renewable energy sources to offset new demand on conventional power sources.	Policies in the Resource Conservation Chapter promote energy efficient design, including greater use of solar energy systems.
EN-13: Local governments should support only the use of the best available technology including monitoring, air, and water impacts for locating any nuclear waste facility.	No nuclear waste facility is proposed in the City or expected to be proposed in the City.
EN-14: Developers and local governments should explore programs to reduce single occupancy vehicle trips such as telecommuting, ridesharing, alternative work schedules, and parking cash-outs.	The City's Transportation Demand Management (TDM) ordinance requires new commercial, industrial, and mixed-use developments estimated to employ 100 persons or more to implement measures to reduce vehicle trips.
EN-15: Utilities and local governments should consider the most cost-effective alternative and renewable energy generation facilities.	Policy RC-4.2 in the Resource Conservation Chapter promotes the use of renewable energy and alternative energy technology.
EN-16: Local governments and project implementation agencies should consider various best practices and technological improvements that can reduce the consumption of fossil fuels such as: <ul style="list-style-type: none"> • Encouraging investment in transit, including electrified light rail • Expanding light-duty vehicle retirement programs • Increasing commercial vehicle fleet modernization • Implementing driver training module on fuel consumption • Replacing gasoline powered mowers with electric mowers • Reducing idling from construction equipment • Incentivizing alternative fuel vehicles and equipment • Developing infrastructure for alternative fueled vehicles • Increasing use and mileage of High Occupancy Vehicle (HOV), High Occupancy Toll (HOT) and dedicated Bus Rapid Transit (BRT) lanes • Implementing truck idling rule, devices, and truck-stop electrification • Requiring electric truck refrigerator units • Reducing locomotives fuel use • Modernizing older off-road engines and equipment • Implementing cold ironing at ports • Encouraging freight mode shift • Limit use and develop fleet rules for construction equipment • Requiring zero-emission forklifts • Developing landside port strategy: alternative fuels, clean engines, electrification 	Policy RC-4.2 in the Resource Conservation Chapter promotes the use of renewable energy and alternative energy technology, which will reduce reliance on fossil fuels.
EN-17: Utilities should consider increasing capacity of existing transmission lines, where feasible.	Since the City is not an electric power provider, this policy is not applicable to the proposed 2010 General Plan Update.
EN-18: Utilities should install and maintain California Best Available Control Technologies on all power plants at the US-Mexico border.	Since the City is not an electric power provider, this policy is not applicable to the proposed 2010 General Plan Update.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
<p>EN-19: Subregional and local governments should explore participation in energy efficiency programs provided by their local utility such as the Ventura Regional Energy Office, South Bay Energy Savings Center, and the San Gabriel Valley Energy Wise program. These programs can offer customized incentives and public awareness campaigns to reduce energy consumption.</p>	<p>The Resource Conservation Chapter promotes energy conservation and reduced electricity and natural gas consumption, consistent with SCE's energy efficiency programs.</p>
<p><i>Strategic Initiative:</i> EN-10S: Local governments should employ land use planning measures, such as zoning, to improve jobs/housing balance and creating communities where people live closer to work, bike, walk, and take transit as a substitute for personal auto travel.</p>	<p>The proposed 2010 General Plan Update would improve jobs-housing balance in the City, as discussed in Section 4.13, Population and Housing.</p>
Air Quality	
<p>AQ-5: Local governments should implement control measures from local Air Quality Management Plans (AQMPs) such as accelerating the turnover of older, more polluting mobile and stationary source equipment using AB 2766 funding per the State Implementation Plan (SIP).</p>	<p>The Public Health and Safety Chapter contains goals and policies for the protection of local and regional air quality.</p>
<p>AQ-6: Local governments should support and pursue environmentally sustainable strategies that implement and complement climate change goals and outcomes such as updating their General Plans to help address the State's AB 32 mandate. This should be consistent with State guidelines and requirements.</p>	<p>The Public Health and Safety Chapter addresses air quality and climate change, with a goal to mitigate against climate change (Goal PS-11).</p>
<p>AQ-7: Local governments should develop policies that discourage the location of sensitive receptors that expose humans to adverse air quality impacts such as amending General Plans, zoning ordinances, business licensing, and related land use permitting processes to minimize human health impacts from exposure of sensitive receptors to local sources of air pollution. Jurisdictions should consider applicable guidance documents, such as ARB's Air Quality and Land Use Handbook: A Community Health Perspective and the South Coast AQMD's Guidance Document for Addressing Air Quality Issues.</p>	<p>The Public Health and Safety Chapter addresses air quality; specifically, PS-9.3 addresses the location of sensitive receptors away from pollutant generators.</p>
<p>AQ-8: Local governments should practice and promote sustainable building practices by: AQ-8.1: Updating their General Plans and/or zoning ordinances to promote the use of green building practices, which include incorporating LEED design standards and utilizing energy efficient, recycled-content and locally harvested or procured materials. AQ-8.2: Developing incentive programs (e.g. density bonuses) to encourage green building and resource and energy conservation in development practices. AQ-8.3: Adopting policies that strive for carbon neutrality for their own facilities and operations</p>	<p>The Resource Conservation Chapter addresses sustainability, green building, and energy conservation issues. The Public Health and Safety Chapter addresses air quality and climate change, with a goal to mitigate against climate change (Goal PS-11).</p>

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
Solid Waste	
SW-9: Local governments should update general plans to reflect solid waste sustainability issues such as waste reduction goals and programs	Goal PF-7 of the Public Facilities and Infrastructure Chapter addresses the reduction of the solid waste entering regional landfills and the encouragement of recycling. The Resource Conservation Chapter contains a goal to mitigate against climate change (Goal PS-11), which includes a policy for waste reduction (Policy PS-11.6).
SW-10: Local governments should discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, landfills should be sited with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities.	The proposed 2010 General Plan Update does not address landfills and the Municipal Code does not specifically allow or conditionally allow landfills in the City.
SW-11: Local governments should discourage exporting of locally generated municipal solid waste (destined for landfills) outside of the SCAG region. Disposal within the county where the waste originates should be encouraged as much as possible, when appropriate. Green technologies for long-distance transport of waste (e.g., clean engines, clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with AQMP and RTP policies should be required.	Goal PF-7 of the Public Facilities and Infrastructure Chapter addresses the reduction of the solid waste entering regional landfills and the encouragement of recycling. Policy PS-11.6 of the Resource Conservation Chapter supports increased composting and recycling. Solid wastes in the City are brought to the West Valley materials recovery facility (MRF), east of the City, and then transported to the Mid-Valley Landfill, approximately 4.5 miles east of the City.
SW-12: Local governments should maximize waste diversion goals and practices and look for opportunities for voluntary actions to exceed the 50% waste diversion target.	Goal PF-7 of the Public Facilities and Infrastructure Chapter addresses the reduction of the solid waste entering regional landfills and the encouragement of recycling. Policy PS-11.6 of the Resource Conservation Chapter supports increased composting, recycling, and waste reduction.
SW-13: Local governments should build local markets for waste prevention, reduction, and recycling practices.	Policy PS-11.6 of the Public Health and Safety Chapter supports increased composting, recycling, and waste reduction, especially on large commercial and industrial waste producers.
<p>SW-14: Developers and local governments should integrate green building measures into project design and zoning including, but not limited to, those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Construction reduction measures to be explored for new and remodeled buildings include:</p> <ul style="list-style-type: none"> • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • An ordinance that requires the inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of building materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed building materials, and (5) use of structural materials in a dual role as finish material (e.g. stained concrete flooring, unfinished ceilings, etc.). • Reuse of existing building structure and shell in 	The Resource Conservation Chapter addresses sustainability, green building, and energy conservation issues. Policy PS-11.6 of the Public Health and Safety Chapter supports increased composting, recycling, and waste reduction. Goal PF-7 of the Public Facilities and Infrastructure Chapter addresses the reduction of the solid waste entering regional landfills and the encouragement of recycling.

TABLE 4.10-5 (Continued)
VOLUNTARY LOCAL GOVERNMENT BEST PRACTICES FROM SCAG'S
REGIONAL COMPREHENSIVE PLAN

SCAG RCP Policies	Proposed 2010 General Plan Update Consistency
<p>renovation projects. Building lifetime waste reduction measures that should be explored for new and remodeled buildings include:</p> <ul style="list-style-type: none"> • Development of indoor recycling program and space. • Design for deconstruction. • Design for flexibility through use of moveable walls, raised floors, modular furniture, moveable task lighting and other reusable components. 	
<p>SW-15: Local governments should develop ordinances that promote waste prevention and recycling such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and instituting ordinances to divert food waste away from landfills and toward food banks and composting facilities.</p>	<p>The Resource Conservation, Public Facilities and Infrastructure, and Public Health and Safety Chapters address sustainability, waste reduction and recycling issues.</p>
<p>SW-16: Local governments should support environmentally friendly alternative waste management strategies such as composting, recycling, and conversion technologies.</p>	<p>Policy PS-11.6 of the Public Health and Safety Chapter supports increased composting, recycling, and waste reduction. Goal PF-7 of the Public Facilities and Infrastructure Chapter addresses the reduction of the solid waste entering regional landfills and the encouragement of recycling.</p>
<p>SW-17: Developers and local governments should develop and site composting, recycling, and conversion technology facilities that are environmentally friendly and have minimum environmental and health impacts.</p>	<p>The City's Municipal Code regulates the siting of recycling facilities in the City.</p>
<p>SW-18: Developers and local governments should coordinate regional approaches and strategic siting of waste management facilities.</p>	<p>The proposed 2010 General Plan Update does not address landfills, and the Municipal Code does not specifically allow or conditionally allow landfills in the City.</p>
<p>SW-19: Developers and local governments should facilitate the creation of synergistic linkages between community businesses and the development of eco-industrial parks and materials exchange centers where one entity's waste stream becomes another entity's raw material by making priority funding available for projects that involve co-location of facilities.</p>	<p>This issue is not under the purview of the General Plan.</p>
<p>SW-20: Developers and local governments should prioritize siting of new solid waste management facilities including recycling, composting, and conversion technology facilities near existing waste management or material recovery facilities.</p>	<p>The proposed 2010 General Plan does not address landfills, and the Municipal Code does not specifically allow or conditionally allow landfills in the City.</p>
<p>SW-21: Local governments should increase education programs to increase public awareness of reuse, recycling, composting, and green building benefits and raise consumer education issues at the County and City level and if appropriate, at local school districts and education facilities.</p>	<p>Policy PF-7.5 of the Public Facilities and Infrastructure Chapter addresses continuing the community's education regarding the benefits of solid waste diversion, recycling, and composting, and maintaining programs.</p>

While no Voluntary Local Government Best Practices have been identified for several regional issues, the RCP discusses these topics as part of the regional framework. These include the topics discussed below.

- The RCP calls for the regional transportation network to be (1) a more efficient transportation system that reduces and better manages vehicle activity and (2) a

cleaner transportation system that minimizes air quality impacts and is energy efficient. SCAG practices and initiatives will meet these goals, complementing the goals and policies for improving the local transportation network, as addressed in the proposed 2010 General Plan Update's Community Mobility Chapter.

- Security and emergency preparedness goals in the RCP include ensuring transportation safety, security, and reliability for all people and goods in the region and preventing, protecting, responding to, and recovering from major human-caused or natural events in order to minimize the threat and impact to lives, property, the transportation network and the regional economy. SCAG's role in security and emergency preparedness is emphasized by the RCP, which will supplement the City's emergency preparedness efforts, as outlined in the proposed 2010 General Plan Update's Public Health and Safety Chapter.
- The RCP promotes sustained economic health for the region, consistent with the City's need for economic stability, as outlined in the proposed 2010 General Plan Update's Economic Development Chapter.
- The RCP also acknowledges the region's need for better schools to improve the local community. The proposed 2010 General Plan Update's Public Facilities and Infrastructure Chapter has a goal (Goal PF-2) to improve access for all Rancho Cucamonga residents to high-quality educational opportunities that satisfy each individual's needs, desires, and potential.

As discussed above, although a few of the policies are not applicable to the City, the proposed 2010 General Plan Update is consistent with the constrained policies and strategic initiatives of the RCP, which are identified as Voluntary Local Government Best Practices. Thus, no conflict with the RCP is expected, and no adverse impacts would occur.

Future development and redevelopment in the City will need to be consistent with the City's Land Use Plan and the goals and policies of the Rancho Cucamonga General Plan, as amended. At the same time, future development and redevelopment projects would need to comply with pertinent development standards and regulations in the City's Development Code (SC 4.10-2). Compliance with local planning policies and other relevant and applicable land use policy or regulations would avoid any significant impacts.

Impact 4.10b: Conflict with the current Rancho Cucamonga General Plan and the City's Development Code is mainly due to a change in the City's vision for its future. This does not represent an adverse impact, since the proposed 2010 General Plan Update will supersede the current Plan. An amendment to the Development Code would also be required. No conflict with the Rancho Redevelopment Project, SCAG's Compass Blueprint, or SCAG's Regional Comprehensive Plan is expected with the proposed 2010 General Plan Update. Implementation of SCs 4.10-1 and 4.10-2 and MM 4.10-1 would reduce any potential impacts to less than significant levels.

Habitat Conservation Plan/Natural Community Conservation Plan

Threshold 4.10c: Would the proposed General Plan Update conflict with any applicable habitat conservation plan or natural community conservation plan?

There is no adopted habitat conservation plan or natural community conservation plan for any land within the Rancho Cucamonga or its SOI.

No habitat conservation plan or natural community conservation plan has been adopted for any area in the City or its SOI. Thus, no conflict with an applicable habitat conservation plan or natural community conservation plan would occur with adoption of the proposed 2010 General Plan Update or with future development and redevelopment allowed under the proposed 2010 General Plan Update.

Impact 4.10c: There is no applicable habitat conservation plan or natural community conservation plan in the City of Rancho Cucamonga. Thus, the proposed 2010 General Plan Update proposed General Plan would not conflict with any habitat conservation plan or natural community conservation plan. No impacts are expected; no mitigation is required.

4.10.7 CUMULATIVE IMPACTS

Growth and development in the City of Rancho Cucamonga and surrounding jurisdictions would be accompanied by changes in existing land uses in San Bernardino County. New development on vacant areas and underutilized lots would lead to an intensification of housing development; commercial, institutional and industrial land uses; and public facilities and infrastructure projects throughout the County.

SCAG estimates an increase in the total housing stock of the County of San Bernardino to 972,561 units by 2035, along with a resident population of 3,133,801 persons. In addition, approximately 1,254,749 jobs countywide would be found within commercial, industrial, public, institutional, and other development projects.

Increasing urbanization and development in the County are indicative of the ongoing developments in the City and the region, as the area develops and vacant lands are replaced with more urban land uses and as underutilized lots are redeveloped into more intensive uses.

The proposed 2010 General Plan Update would not divide established communities or result in the introduction of incompatible uses in the area, provided compliance with the City's development standards and applicable regulations. New development is generally evaluated for consistency with the local jurisdiction's land use policies, including the General Plan and Zoning Ordinance/Development Code. Future development has been anticipated in the General Plans for the cities in the County and is not expected to result in significant adverse land use impacts.

Each proposed development project would be subject to the city's jurisdictional development review process and, if discretionary actions are needed, will be subject to evaluation for potential environmental impacts as required by CEQA. This review process would address potential land use compatibility issues and planning policy conflicts. Future development and redevelopment in the City of Rancho Cucamonga and in the surrounding areas would proceed in accordance with applicable General Plans and Zoning Ordinances/Development Codes. As part of permit processing, the development plan review processes for new development and redevelopment would analyze a project for conformity with applicable land use plans and

policies, and within the context of existing and planned developments relative to the environmental goals, objectives, and policies of the applicable general plan. Projects requiring General Plan Amendments or Zone Changes/Variations would need to show consistency with the goals of the applicable general plan as well as the Zoning Ordinance/Development Code; thus, these projects are not expected to lead to land use incompatibilities or conflicts.

Planned infrastructure and public facilities will provide the necessary facilities and services to existing and future developments. Thus, the infrastructure projects would complement the private development projects constructed in the area.

The development of vacant lands and development trends in the surrounding area are not expected to result in cumulative, significant adverse land use impacts, provided compliance with applicable land use controls. No significant cumulative adverse impacts on land use and planning are expected from the proposed 2010 General Plan Update and/or from future development and redevelopment in the County of San Bernardino.

Where there is no adopted habitat conservation plan or natural community conservation plan in the City or its SOI, there are habitat mitigation areas in the northern portion of the City and in the SOI, which have been designated "Conservation" in the proposed Land Use Plan. No development is allowed in these areas. There is no Countywide multi-species habitat conservation plan, although several habitat conservation plans (HCPs) have been adopted in the County. These include:

- The West Mojave Plan,
- The Upper Santa Ana Wash HCP,
- The Angelus Block HCP,
- The Highlands Roadway Project HCP,
- The Cushenbery Sand and Gravel HCP,
- The High Desert Power Project HCP,
- The Reichel HCP,
- The SCE/Etiwanda and Mira Loma Corridor HCP,
- The Sunland Communications HCP, and
- The Vulcan Material (aka Calmat) Cajon Creek and Delhi-Sands Flower Loving Fly HCP.

No development is allowed in the areas covered by these HCPs; thus, no conflict with the HCPs would occur from future development and redevelopment in the County.

4.10.8 MITIGATION MEASURES

MM 5.10-1 The City of Rancho Cucamonga Planning Department shall monitor all development that takes place within the Study Area against the projected target densities detailed in Tables LU-16, LU-17, and LU-18 of the proposed 2010 General Plan Update. As buildout of the proposed 2010 General Plan Update Study Area approaches 80 percent of the total additional development allowed, the City of Rancho Cucamonga shall initiate environmental analysis to address full buildout of the proposed 2010 General Plan Update or prepare an update to the General Plan to be completed prior to reaching the established target densities herein.

4.10.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Established Communities

Less Than Significant.

Plan Consistency

Less Than Significant.

Habitat Conservation Plan/Natural Community Conservation Plan

No Impact.

Cumulative Impacts

Less Than Significant.

4.11 MINERAL RESOURCES

This section discusses mineral resources in the City of Rancho Cucamonga based on a review of published reports regarding the local presence of oil, gas, geothermal, and aggregate (sand and gravel) resources within the City limits.

4.11.1 RELEVANT POLICIES AND REGULATIONS

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA), as codified in the *California Public Resources Code* (Section 2710 et seq.), provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations to ensure that adverse environmental impacts are minimized and mined lands are restored to a usable condition. SMARA also encourages the production, conservation, and protection of the State's mineral resources. Section 2207 of the *California Public Resources Code* provides annual reporting requirements for all mines in the State, and the State Mining and Geology Board is granted authority and obligations under this section.

SMARA also mandates the classification of lands with valuable mineral resources so that land use decisions that may affect mineral-bearing lands can be made with the knowledge of these resources. The SMARA requires the State Geologist to classify areas with potential for significant mineral resources. It states:

The primary objective of the mineral land classifications is to assure that mineral potential and its significance is recognized and considered before land use decisions that could preclude mining are made. The availability of mineral resources is vital to our society. Yet for most types of minerals, economic deposits are rare, isolated occurrences. Access to terrain for purposes of mineral exploration and mine development has become increasingly difficult because California is also faced with growing land use competition.

The State Mining and Geology Board has classified land in California based on the availability of mineral resources. Four mineral resources zone (MRZ) designations have been established for classifying sand, gravel, and crushed rock resources:

- **MRZ-1:** Adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** Adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled.
- **MRZ-3:** The significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** There is insufficient data to assign any other MRZ designation.

Under SMARA, aggregate materials are classified as reserves or resources. Reserves are defined as aggregate materials believed to be acceptable for commercial use that exist within property boundaries owned or leased by an aggregate-producing company, and for which permission allowing extraction and processing has been granted by the proper authorities. Aggregate resources include reserves and similar potentially usable aggregate materials that

may be economically mined in the future, but for which no use permit allowing extraction has been granted.

The mineral lands inventory is subject to local public review to ensure that mineral deposits of State or regional significance are identified and protected for future extraction. The State Geologist also prepares an annual mining report that includes information on the amount of land disturbed during the previous year, acreage reclaimed during the previous year, and amendments to the reclamation plan. SMARA further requires mining operations to have approved Mining/Reclamation Plans prior to the start of operations, to allow for future reuse of the mine.

4.11.2 EXISTING CONDITIONS

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate, another mineral resource, refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland-cement-concrete (PCC) aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, fill and the production of other construction materials.

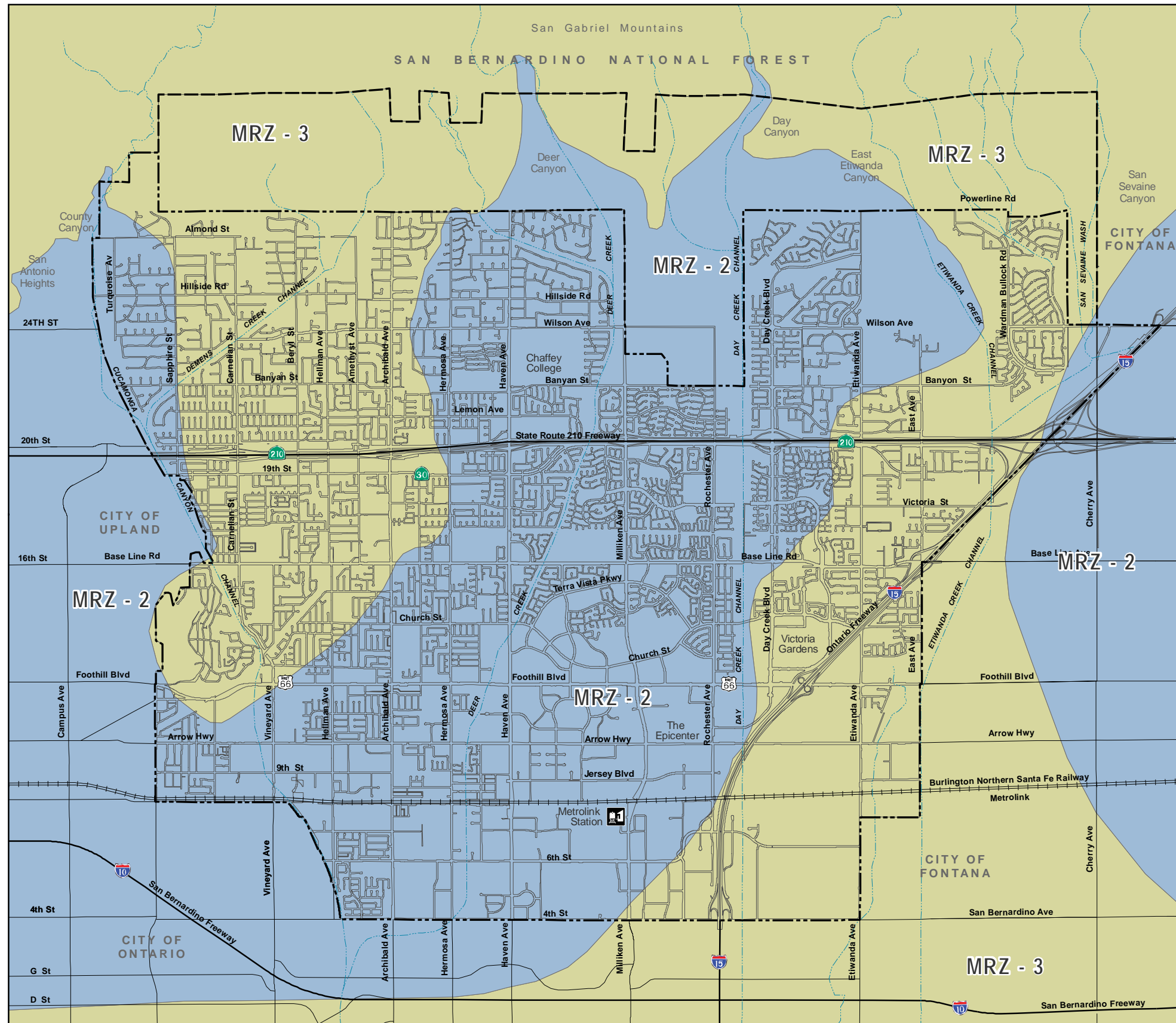
Based on the California Department of Conservation maps, there are no oil, gas, or geothermal resources in the City of Rancho Cucamonga or the surrounding area (DOGGR 2001). There is one plugged and abandoned dry hole near the intersection of Church Street and Hermosa Avenue. No other exploratory oil wells are present in or near the City (DOGGR 2007).

Significant local sand and gravel resources in the City are found in alluvial fans in and near the City, including the Lytle Creek (San Sevaine Wash and Etiwanda Creek), San Antonio Creek, Cucamonga Creek, Deer Creek, and Day Creek. These alluvial fans generally start at the canyons at the base of the San Gabriel Mountains, north of the City. While the northern ends of these fans remain undeveloped, the creeks have been channelized in and near the City of Rancho Cucamonga and in developed areas along the creek (SMGB 1988).

As of 2008, mining operations were occurring along San Antonio Creek, Day Creek, and Cucamonga Creek, but none were located within the City of Rancho Cucamonga. The Holliday Rock Campus Plant operates along Cucamonga Creek, just west of the City limits. Inland Rock has a sand and gravel extraction operation along Day Creek, north of the City and within its SOI. The Foothill Quarry operates on San Antonio Creek, west of the City. These operations produce construction aggregates (sand and gravel) (OMR 2009).

Based on the Mineral Land Classification prepared by the California Department of Conservation, the City is mainly located within the Claremont-Upland Production-Consumption region, where regionally significant mineral resources have been identified along Day Creek, Deer Creek, Cucamonga Creek, and San Antonio Wash. The northeastern edge of the City is located in the San Bernardino Production-Consumption region, where regionally significant mineral resources have been identified along Lytle Creek and the San Sevaine Wash near the City. Exhibit 4.11-1, Mineral Land Classification, shows mineral resource areas in and near the City, as classified by the California Department of Conservation (SMGB 1988).

The Mineral Land Classification for the area shows that the areas along the washes and creeks are designated as MRZ-2, where significant mineral deposits are present, with the rest of the City designated as MRZ-3, which means that aggregate resources are present but their



Mineral Resource Zones

- MRZ - 2
- MRZ - 3

Base Features

- Rancho Cucamonga City Boundary
- Sphere of Influence
- Waterways



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Mineral Land Classification

Rancho Cucamonga General Plan Update

Source: California State Department of Conservation, California Geological Survey, Mineral Land Classification of the Greater Los Angeles Area, 1987

Exhibit 4.11-1



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significance cannot be evaluated with present data. This designation could be largely due to the presence of boulders and gravelly soils in the City (SMGB 1988).

The Claremont-Upland Production-Consumption Region includes the cities of Claremont, Upland, La Verne, Montclair, Rancho Cucamonga, Pomona, San Dimas, and portions of the cities of Ontario, Diamond Bar, Walnut, La Puente, and Covina. Aggregate production in the Claremont-Upland Production-Consumption Region was approximately two to five million tons per year in 2005 (CGS 2006b). This is less than 3 percent of the State's total aggregate production (CGS 2007a).

The northeastern edge of the City is located within the San Bernardino Production-Consumption Region, which includes urbanized areas of San Bernardino and Riverside counties, south of the San Bernardino Mountains, and east of the Santa Ana Mountains to San Gorgonio Creek. Aggregate production in the Lytle Creek area of the San Bernardino Production-Consumption Region was approximately five to ten million tons per year in 2005 (CGS 2006b). This is less than 5 percent of the State's total production of 235.3 million tons of sand, gravel, and crushed stone (CGS 2007a).

Within the City of Rancho Cucamonga, approximately 1,119 acres are classified as containing aggregate resources, and 1,411 acres containing aggregate resources are located in the SOI. Additionally, there are 262 acres containing aggregate resources that are located proximate to but outside the boundaries of the City and SOI. An estimate of regionally significant aggregate resources in the City and SOI by sector is provided in Table 4.11-1, and sector locations are shown in Exhibit 4.11-2, Regionally Significant Aggregate Resources. The existing land use and the proposed land use designations are also shown in the table.

Current aggregate resources in the sectors of the Claremont-Upland and San Bernardino Production-Consumption regions, which are located in or near the City of Rancho Cucamonga (including property owned or leased for which permission for extraction has been granted) is estimated at approximately 537.9 million tons.

In 2009, State Geologist processed the termination of mineral resource designation for 18 areas in 11 sectors due to the presence of adjacent incompatible land use developments, such as housing, a new freeway, and a flood-control channel; therefore, these areas are no longer considered to be mineral resource areas. Among these are C-2 on the Upper Cucamonga Fan and portions of D-3 on the Deer Creek Fan. While 2 new sectors were proposed for designation in the San Bernardino Production-Consumption region, another 57 areas in 8 sectors were processed for termination. This included portions of A-4 and A-7 along the San Sevaine Wash (SMGB 2009a and 2009b). Areas where the SMARA designation has been terminated are shown as "Sector built over by Development" in Exhibit 4.11-2.

**TABLE 4.11-1
REGIONALLY SIGNIFICANT AGGREGATE RESOURCES**

Sector Number	Sector Name	Acres (Approximate)		Estimated Potential Aggregate Reserves (short tons)	Existing Land Use (2009)	General Plan Land Use Designations
		City	SOI			
A-4	Lytle Creek Fan	352	0	167,300,000	Predominantly flood control and water recharge area; residences and park	Flood Control/Utility Corridor, General Commercial, and Low Density Residential
A-7	Lytle Creek Fan	124	0	210,800,000	Predominantly flood control; developed residences, high school, and vacant lands	Low Density Residential, Flood Control, School, Medium Density Residential
C-1	Upper Cucamonga Fan	88	0	19,600,000	Flood control; open space; and a small area developed as residential	Open Space, Hillside Residential, Flood Control
C-2	Upper Cucamonga Fan	44	0	14,100,000	Flood control; residential development	Flood Control, small portion of Very Low Density Residential
D-1	Deer Creek Fan	0	325	61,800,000	Flood control; open space; and some residential-designated vacant lands	Flood Control, Open Space, and small portion designated Hillside Residential
D-3	Deer Creek Fan	511	880	86,400,000	Predominantly flood control and active sand and gravel mining; residential areas mostly existing with very small portions vacant; Los Osos High School	Predominately Flood Control and Conservation, with small areas designated as Very Low, Low Medium, and Medium High Residential; School
D-16	Deer Creek Fan	0	206	13,900,000	Flood control, water recharge area; open space and conservation areas	Flood Control, Open Space, Conservation, and Hillside Residential
Total		1,119	1,411	537,900,000		

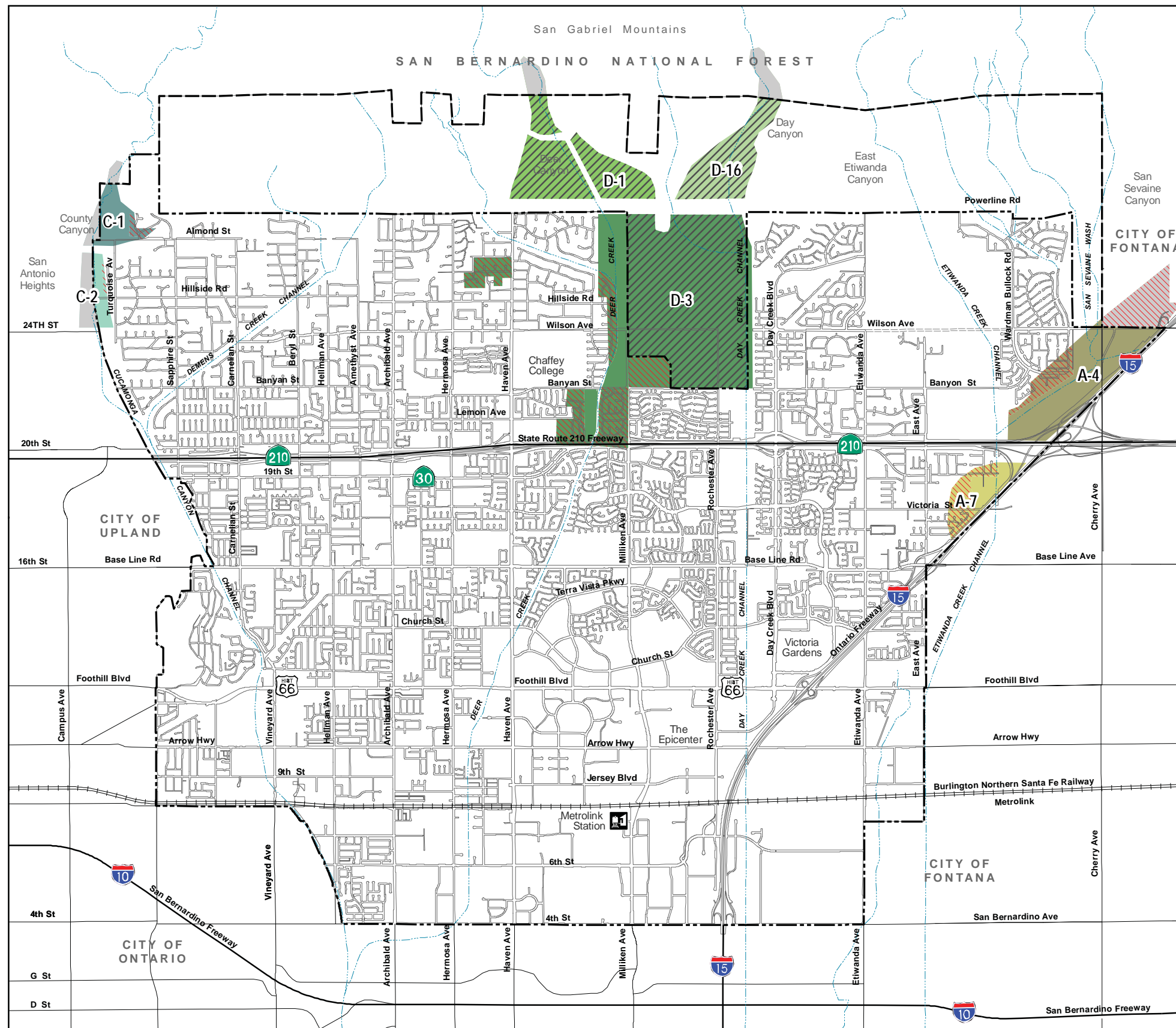
Source: Rancho Cucamonga 2009b.

4.11.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on mineral resources if it would:

Threshold 4.11a: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and/or

Threshold 4.11b: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.



- Aggregate Resource Sectors**
- A-4: Lytle Creek Fan
 - A-7: Lytle Creek Fan
 - C-1: Upper Cucamonga Fan
 - C-2: Upper Cucamonga Fan
 - D-1: Deer Creek Fan
 - D-3: Deer and Day Creek Fans
 - D-16: Day Creek Fan

- Location**
- In Sphere of Influence
 - Outside Planning Area

- Built Over**
- Sector Built Over By Development

Note: Refer to Table RC-1 for Resource Sector Information.

- Base Features**
- Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways

Source: California State Department of Conservation, California Geological Survey.



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Regionally Significant Aggregate Resources

Rancho Cucamonga General Plan Update

Source: California State Department of Conservation, California Geological Survey

Exhibit 4.11-2



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4.11.4 GENERAL PLAN GOALS AND POLICIES

The proposed 2010 General Plan Update recognizes the importance of conserving mineral resources of regional significance. At the same time, it is sensitive to the potential land use conflicts of extraction activities with adjacent land uses. The draft Resource Conservation Chapter includes the following goal and policies:

GOAL RC-7: Protect aggregate mining resources that are sustainably mined and managed, and that minimize impacts to surrounding areas.

Policy RC-7.1: Consider the community value and benefit of designated regionally significant aggregate resources prior to approving any such designated lands for other types of development.

Implementation Action: *Continue to balance the projected need for resources with community priorities.*

Policy RC-7.2: Minimize direct and indirect negative impacts of mineral extraction activity on sensitive and adjacent land uses.

Implementation Action: *Enforce current conditions on approved extraction activities. Carefully review and condition any proposed expansion of existing extraction operations or establishment of any new such activities.*

Policy RC-7.3: Ensure effective restoration of expended mining sites in a manner that is aesthetically attractive.

Implementation Action: *Continue to protect the integrity and quality of life enjoyed by existing residences and businesses through the imposition of special development standards, such as setbacks and screening/buffering measures to minimize potential land use conflicts while permitting extraction of valuable mineral resources in areas determined suitable for such operations. Enforce current conditions on approved extraction activities. Carefully review and condition any proposed expansion of existing extraction operations or establishment of any new such activities.*

Policy RC-7.4: Where the City has determined that urban use is a priority over the preservation of potential sites for aggregate recovery, the City shall seek the removal of such areas from SMARA maps.

Implementation Action: *Continue to petition the State for removal of affected lands from SMARA maps in areas where significant conflicts could be anticipated to occur with either existing or planned use.*

Policy RC-7.5: In areas that the State of California has designated as regionally significant aggregate resources, the City will require property titles to include notice of the presence of such resources, in accordance with SMARA.

Implementation Action: *Require the recordation of a notice of the presence of aggregate resources with all property titles within designated sectors to assist in the conservation of appropriately located areas within Rancho Cucamonga.*

4.11.5 STANDARD CONDITIONS OF APPROVAL

There are no existing regulations that the City or future development and redevelopment in the City are required to implement with regards to mineral resources.

4.11.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment in the City under the 2010 General Plan Update would occur in areas identified to contain mineral resources.

Regionally Important Mineral Resources

Threshold 4.11a: Would the proposed General Plan Update result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Sand and gravel are necessary ingredients for urban construction, and builders often rely on local sources for these materials to control construction costs. However, the extraction of aggregate impacts the surrounding environment and can adversely impact adjacent planned land uses in terms of noise, dust, traffic, and aesthetics. Consequently, land uses near ongoing or planned resource extraction areas must be carefully considered to minimize potential conflicts.

The designated aggregate resource sectors are located at the northern end of the City and in the SOI, where limited urban development is present and proposed. The majority of these areas are planned for Open Space, Conservation, Flood Control/Utility Corridor, or Hillside Residential uses, which allow low density developments. As of 2009, approximately 437 acres (17 percent) of the aggregate resource sectors in the City and SOI have been developed with residential uses and high schools.

According to the proposed Land Use Plan, the northwestern corner of the City along Cucamonga Creek (Sector C-1) is planned for Hillside Residential and Open Space. While the Open Space use would not result in the loss of availability of mineral resources, future residential uses near Open Space uses would preclude mining operations on the residential site and adjacent areas.

The resource area along San Sevaine Wash (Sectors A-4 and A-7) is designated as Flood Control/Utility Corridor and will continue to provide future access to underlying aggregate resources.

Outside the City but located within the SOI, the resource area along Deer Canyon and Deer Creek (Sectors D-1 and D-3) is designated as Flood Control/Utility Corridor and will continue to provide future access to underlying aggregate resources. Another resource area along Day Creek is designated as Open Space and Flood Control/Utility Corridor, with a small area as Hillside Residential. Again, while the Open Space use and Flood Control/Utility Corridor designations would retain access to underlying mineral resources, future residential uses would preclude mining operations on the residential site and adjacent areas.

The Hillside Residential areas planned for aggregate resource areas are limited in size and are not expected to preclude all mining activities within the sector. Additionally, the draft Resource Conservation Element also contains a goal (Goal RC-7) for the protection of aggregate mining resources, supported by policies to consider the value of the resources prior to approval of development (Policy RC-7.1), to minimize impacts on adjacent sensitive uses (Policy RC-7.2),

to allow for future restoration of mined lands (Policy RC-7.3), to terminate designation of areas suitable for urban uses (Policy RC-7.4), and to include the presence of aggregate resources into property titles (Policy RC-7.5).

In implementing these goal and policies, the City will also work with the County of San Bernardino in the review of any potential aggregate mining operations in the SOI to assure that they are compatible with planned land uses and sensitive habitat areas (Policy RC-7.2). At the same time, the City is expected to balance the need for local mineral resources with building over these resource areas because, once an area is developed, the underlying resources are no longer accessible (Policy RC-7.1). Areas suitable for urban uses would be petitioned to have their designations removed through a termination process with the State Mining and Geology Board (Policy RC-7.4). At the same time, the recordation of the presence of regionally significant aggregate resources on individual property titles would increase awareness and promote conservation (Policy RC-7.5).

Thus, mining operations may occur within the City and SOI until such time that the sites are restored and developed with Hillside Residential uses. Despite implementation of General Plan policies, the potential loss of these resources would be significant and unavoidable.

Impact 4.11a: Future development under the proposed General Plan Update would preclude mining operations, resulting in the loss of availability of a known mineral resource in areas planned for Hillside Residential development. Compliance with goals and policies in the 2010 General Plan Update would limit the loss of these resources; however, impacts would be significant and unavoidable.

Locally Important Mineral Resources

Threshold 4.11b: Would the proposed General Plan result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The draft Resource Conservation Chapter of the 2010 General Plan Update acknowledges the presence of regionally significant resources in the City and its SOI. While the City does not propose the direct preservation of these areas, the goal and policies in the draft Resources Conservation Chapter call for the management of these resources in consideration of their value, development pressures, and adjacency effects. Impacts associated with the future development and redevelopment under the 2010 General Plan Update on designated aggregate resource sectors are discussed above under Thresholds 4.11a.

Construction of future development and redevelopment in the City would require sand and gravel resources for roadways, infrastructure, and building construction. These resources would be derived from local sources in the SOI or other nearby areas, but the demand for sand and gravel resources is not considered significant when compared to available resources or to construction activity in the region. Thus, the potential loss of availability of these local resources due to future development would result in a less than significant impact, and adherence to Goal RC-7 and associated policies would further reduce the potential for impacts; no mitigation is required.

Impact 4.11b: Future development under the 2010 General Plan Update would preclude mining operations in a few areas planned for Hillside Residential development. Impacts related to the loss of locally important resources, such as sand and gravel, are expected to be less than significant with

adherence to Goal RC-7 and associated policies; no mitigation is required.

4.11.7 CUMULATIVE IMPACTS

The cumulative impacts on mineral resources are evaluated based on the potential impacts of future development and development in the City of Rancho Cucamonga, the SOI, and the Claremont-Upland and San Bernardino Production-Consumption Regions.

The State Mining and Geology Board recognizes that urban development has precluded access to the majority of known resources through development (including construction of roadways and infrastructure) on or adjacent to the resource areas. The recent termination of resource designations in sectors within the Claremont-Upland Production-Consumption Region, discussed previously, is evidence of continuing urban encroachment into designated mineral resource areas.

While this has occurred in the sectors near the City and in its SOI, the 2010 General Plan Update proposes to protect mining operations and mineral resources through adherence to Goal RC-7 and the associated policies (Policies RC 7.1 through RC 7.5), as stated previously. This would discourage incompatible development on or near existing resource areas.

Future development and redevelopment under the 2010 General Plan Update would contribute to cumulative demand for construction aggregates in the region. Most of the production-consumption regions in the State do not have sufficient supplies to meet their projected 50-year demand. The California Geological Survey estimates that the Claremont-Upland Production-Consumption Region has a 50-year demand for aggregate resources in the amount of 300 million tons.¹ However, only 147 million tons of permitted aggregate resources are available. For the San Bernardino Production-Consumption Region, the 50-year demand for aggregate resources is 1,074 million tons, with only 262 million tons of permitted resources. Thus, existing permitted resources cannot meet anticipated demands to the year 2056 in both regions (CGS 2006b). Therefore, the loss of additional mineral resources due to buildout of the 2010 General Plan Update Study Area, although not locally significant, would contribute to a cumulatively significant impact related to the loss of known mineral resources. This impact would be significant and unavoidable.

4.11.8 MITIGATION MEASURES

No mitigation measures have been identified.

4.11.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Regionally Important Mineral Resources

Significant and Unavoidable.

Locally Important Mineral Resources

Less Than Significant.

¹ This 50-year period began in 2006.

Cumulative Impacts

Significant and Unavoidable.

4.12 NOISE

This section analyzes potential noise impacts associated with the worst-case assumptions for noise associated with buildout of the 2010 General Plan Update Study Area and is summarized from the *Noise Assessment for the Rancho Cucamonga General Plan Update, City of Rancho Cucamonga* (Noise Assessment) prepared by Mestre Greve Associates (February 2010) included in Appendix G to this PEIR. This section provides background information on noise and community noise assessment criteria; presents existing noise levels in the project area; and examines noise impacts that would potentially occur during construction and operation of future development and redevelopment under the proposed 2010 General Plan Update.

Noise Criteria and Definitions

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the A-weighted decibel (dBA).

Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. A greater distance traveled results in a greater influence and resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, temperature and humidity also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels.

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criteria is based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance.

Noise Assessment Metrics

The description, analysis and reporting of community noise levels around communities is made difficult by the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these metrics attempts to quantify noise levels with respect to community response. Most of the metrics use the A-Weighted noise level to quantify noise impacts on humans. A-Weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Noise metrics can be divided into two categories: single event and cumulative. Single-event metrics describe the noise levels from an individual event such as an aircraft fly over or perhaps a heavy equipment pass-by. Cumulative metrics average the total noise over a specific time period, which is typically one or 24 hours for community noise problems. For this project, a cumulative noise metrics assessment was used.

Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on man, (2) the variety of noises found in the environment, (3) the variations in noise levels that occur as a person moves through the environment, and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. Two of the predominant noise scales are the Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described below.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the “energy” average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1-hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL). It is the energy sum of all the events and background noise levels that occur during that time period.

CNEL (Community Noise Equivalent Level), is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. The evening time period (7 PM to 10 PM) penalizes noises by 5 dBA, while nighttime (10 PM to 7 AM) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect increased sensitivity to noise during these time periods.

Ldn (or DNL), the day-night scale is similar to the CNEL scale. The only difference between Ldn and CNEL is that evening noises are not penalized for the Ldn metric.

L(%) is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example since 5 minutes is 25% of 20 minutes, L(25) (or L25) is the noise level that is equal to or exceeded for five minutes in a twenty-minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example most daytime County, State and City Noise Ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words, the Noise Ordinance states that no noise level should exceed 55 dBA for more than fifty percent of a given period.

4.12.1 RELEVANT POLICIES AND REGULATIONS

Public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise.

State

Title 24 of the *California Code of Regulations* (California Building Standards Code) requires that residential structures, other than detached single-family dwellings, be designed to prevent the intrusion of exterior noise so that the interior CNEL with windows closed, attributable to exterior sources, shall not exceed 45 dBA in any habitable room.

Local

City of Rancho Cucamonga 2010 General Plan Update

The City of Rancho Cucamonga Public Health and Safety Chapter of the 2010 General Plan Update specifies outdoor noise level limits for land uses impacted by transportation noise sources. Generally, the City requires that new developments be designed to achieve these standards.

City of Rancho Cucamonga Noise Ordinance

Noise standards for the City of Rancho Cucamonga are currently under review by the City and are proposed to be modified with approval of the proposed 2010 General Plan Update and certification of this PEIR. According to the proposed 2010 General Plan Update, the City will review the noise standards contained in the City of Rancho Cucamonga Development Code and revise these standards to reflect the general noise/land use compatibility guidelines identified in the draft Public Health and Safety Chapter of the proposed 2010 General Plan Update. The proposed 2010 General Plan Update proposes to replace the current noise standards with the new guidelines. Due to these proposed changes, the City's noise ordinance contained in the City of Rancho Cucamonga Development Code is used in determining levels of significance for noise in this PEIR.

A noise ordinance is designed to control unnecessary, excessive and annoying sounds from stationary (non-transportation) noise sources. Noise ordinance requirements cannot be applied to mobile noise sources such as heavy trucks when traveling on public roadways. Federal and State laws preempt control of mobile noise sources on public roads. Noise ordinance standards typically apply to industrial and commercial noise sources impacting residential areas. They are also applicable to noise generated at parks and schools impacting residential areas. The City of Rancho Cucamonga's Municipal Code prohibits the production of excessive noise, and will be applied to future development within the City and SOI to determine potential noise impacts.

General Residential and Commercial Exterior Noise Standards

Section 17.02.120 of the City of Rancho Cucamonga's municipal code sets limits on the exterior noise levels that would be tolerated. Noise ordinance limits are specified using the "Basic Noise Level" as its reference criteria. The municipal code defines the Basic Noise Level as "the acceptable noise level within a given district." The City's exterior noise standard puts restrictions on the duration of noises of various magnitudes. The noise ordinance sets the following time limits on noise sources in all residential and commercial districts. All of these restrictions apply to each noise source.

- a. Basic Noise Level for a cumulative period of not more than 15 minutes in any one hour; or
- b. Basic Noise Level plus 5 dBA for a cumulative period of not more than 10 minutes in any one hour; or
- c. Basic Noise Level plus 14 dBA for a cumulative period of not more than 5 minutes in any one hour; or
- d. Basic Noise level plus 15 dBA at any time.

Restrictions are summarized in Table 4.12-1 in terms of L%, and the maximum duration in any given hour. If the noise source is impulsive or simple tone, the noise standard for each of the L% categories is 5 dBA less than what it is for noise sources that are neither impulsive nor pure tone.

**TABLE 4.12-1
CITY OF RANCHO CUCAMONGA EXTERIOR NOISE STANDARDS**

	L25	L16.7	L8.3	Lmax
Noise Level Limit*	BNL	BNL+5 dBA	BNL+14 dBA	BNL+15 dBA
Noise Level Limit (impulse or pure tone)	BNL- 5 dBA	BNL	BNL+9 dBA	BNL+10 dBA
Maximum allowable time in any 1-hour period that the noise level can exceed the noise level limit	15 minutes	10 minutes	5 minutes	Never Allowed
BNL=Basic Noise Level (dBA) * Noise is neither impulsive nor pure tone L25, L16.7, and L8.3 represent L% values. See above for the definition of L% Source: Mestre Greve Associates 2010c.				

The noise ordinance exempts certain activities from the standard. These activities include City or school approved activities that take place between 7 AM and 10 PM, outdoor gatherings with a temporary use permit granted by the City, mechanical warning devices that operate within any hour no longer than 30 minutes after they start, and construction activities that abide by the restrictions, as specified.

Residential Noise Standards

The City has adopted performance standards that are applicable in residential districts. Those standards are shown in Table 4.12-2.

**TABLE 4.12-2
CITY OF RANCHO CUCAMONGA RESIDENTIAL PERFORMANCE STANDARDS**

Location of Measurement	Maximum Allowable	
	10 PM to 7 AM	7 AM to 10 PM
Exterior	55 dBA	60 dBA
Interior	40 dBA	45 dBA
* Fully enclosed interior with windows and doors shut. Source: Municipal Code Chapter 17.08.080		

The City provides exemptions to the standard for emergency vehicles. Temporary construction activities that occur between the hours of 6:30 AM and 8:00 PM, except Sundays and national holidays, are also exempt provided that all other required conditions are satisfied.

Office and Commercial Noise Standards

The City has adopted standards that are applicable in office and commercial districts. Table 4.12-3 shows the maximum allowable exterior noise levels that can be generated by commercial and office activities.

**TABLE 4.12-3
CITY OF RANCHO CUCAMONGA COMMERCIAL PERFORMANCE
STANDARDS**

Location of Measurement	Maximum Allowable	
	7 AM to 10 PM	10 PM to 7 AM
Lmax (Exterior)	65 dBA	60 dBA
Source: Mestre Greve Associates 2010c.		

In addition to the maximum noise levels tolerated by the City, the ordinance also requires that loading and unloading that occurs between 10 PM and 7 AM not cause a noise disturbance in residential areas.

Industrial Noise Standards

The City has adopted noise standards that are applicable to industrial districts. The ordinance categorizes industrial districts into three categories. Classes A, B and C represent the industrial park, general industrial and heavy industrial categories, respectively. Table 4.12-4 shows the maximum noise levels that are tolerable in each of the three industrial districts.

**TABLE 4.12-4
CITY OF RANCHO CUCAMONGA INDUSTRIAL PERFORMANCE
STANDARDS**

Location of Measurement	Class A (Industrial Park)	Class B (General Industrial)	Class C (Heavy Industrial)
Lmax (Exterior)	65 Ldn	75 Ldn	85 Ldn
Lmax (Interior)	60 Ldn*	65 Ldn*	65 Ldn ¹
* Structure occupied by more than one use 1. Where use is within 200 feet of a residential zone Source: Mestre Greve Associates 2010c.			

Construction Noise Standards

Under item 4 of the Special Provisions paragraph in Chapter 17.02.120 of the Municipal Code, noise generated by construction activities are allowed only if construction takes place between 6:30 AM and 8:00 PM on weekdays or Saturdays. Noise from construction would never be allowed on Sundays or national holidays. In addition to these time-of-day and day-of-week restrictions, construction would only be allowed if the construction noise levels also conform to all conditions specified by the general standards, where the basic noise level that is 65 dBA. This means that all construction noise has to be such that the L25 is less than 65 dBA, its L16.7 is less than 70 dBA, its L8.3 is less than 79 dBA, and its Lmax is less than 80 dBA in order for there to be no construction noise impacts.

Property Maintenance Noise Standards

Under item 6 of the Special Provisions paragraph in Chapter 17.02.120 of the Municipal Code, noise that results from the maintenance of real property is permitted, provided the activities take place between the hours of 8 AM and 8 PM on any day except Sunday or between the hours of 9 AM and 8 PM on Sunday.

Animal Noise Standards

Chapter 6.02.0.40 of the Municipal Code sets limits on animals that habitually make noise. The ordinance puts restriction on animals from allowing them to “make any other loud noise in such a manner at any time, day or night, as to cause general annoyance or discomfort to a neighboring inhabitant.”

4.12.2 EXISTING CONDITIONS

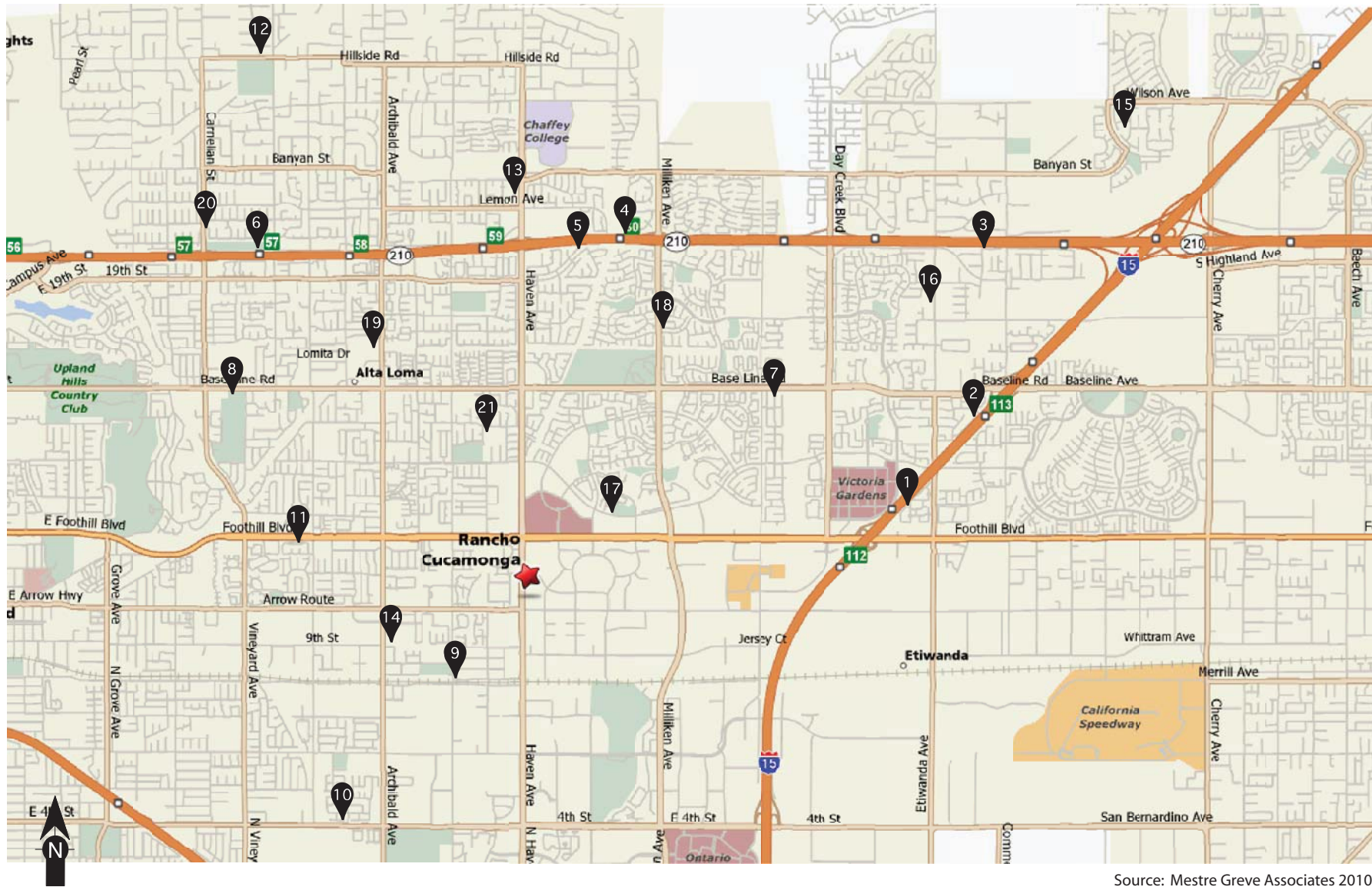
Existing Noise Measurements

Noise measurements were taken to record the actual existing noise levels (as opposed to the modeled existing noise levels) at various locations throughout the City. The noise measurements represent a snapshot of the current noise environment within the City.

A noise measurement survey of the City was conducted to determine the location of noise measurement sites that would provide a noise profile of the City. Several criteria were used in the site selection process including, but not limited to, the proximity of a measurement site to sensitive land uses as well as its proximity to significant noise generators. Several of the significant noise generators within the City are the SR-210, I-15, Base Line Road, and Foothill Boulevard. This was due to the very high volume of automobile and truck traffic at these freeways and roadways. To provide noise measurement coverage of the area, measurement sites were chosen within the confines of the City and its SOI. After the site selection process was over, a series of short-term noise measurements were taken at the chosen sites.

Twenty-one short-term noise measurements were taken within the City and its SOI, over a three-day period from July 7 to July 9, 2009 between 8:30 AM and 3:00 PM. The measurement site locations are listed below in Table 4.12-5 and shown in Exhibit 4.12-1, Noise Measurement Locations.

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Source: Mestre Greve Associates 2010

Noise Measurement Site Locations

Rancho Cucamonga General Plan Update

Exhibit 4.12-1



**TABLE 4.12-5
EXISTING NOISE MEASUREMENT LOCATIONS**

Site Number	Existing Location
1	Inside apartment complex, central location, adjacent to the I-15 freeway
2	Colonial Drive and Bungalow Way, on sidewalk, adjacent to I-15 Freeway
3	Mueller Court and Dicarlo Place, on sidewalk, adjacent to SR-210 Freeway
4	Near end of walking path, off of Silversun Court, adjacent to SR-210 Freeway
5	Ring Avenue, north tip of cul-de-sac, on sidewalk, next to SR-210 Freeway
6	Beryl Park, west of tennis courts, at edge of soccer field, next to SR-210 Freeway
7	Fennel Road, end of cul-de-sac, near Base Line Road
8	Redhill Community Park, (Base Line Road and Vineyard), north of shuffle board area
9	North side of Humboldt Avenue, near cul-de-sac, on dirt
10	Glenaire Court, end of cul-de-sac, near complex entrance on Golden Oak Road
11	On sidewalk inside complex, between Lion Street and Hellman Avenue, on Foothill Boulevard
12	Intersection of Hillside Road and Buckthorn Avenue, on grass at north-east side
13	Between sidewalks in complex, near Haven Avenue, about 390 feet north of Lemon Avenue
14	On school ground, next to Archibald Avenue, near playground
15	In park, near intersection of Santa Ynez Place and Hickcox Lane, on playground pad
16	On walking trail, west side of Etiwanda Avenue, between Victoria Street and Carnesi Drive
17	Walking path, Church Street, between Ralph M. Lewis Park and Jamboree complex
18	Genova Road, end of cul-de-sac, between cul-de-sac and Milliken Avenue
19	On sidewalk, in complex near entrance from Archibald Avenue, south of Monte Vista Street
20	Intersection of Carnelian Street and Somerset Drive, north-east corner, on sidewalk
21	On school ground, next to Palo Alto Street, at bus entrance, near Center Avenue and Palo Alto Street
Source: Mestre Greve Associates 2010c.	

Measurement data for the 21 existing locations are contained below in Table 4.12-6.

**TABLE 4.12-6
EXISTING NOISE MEASUREMENTS**

Site Number	Leq	Lmax	Lmin	L8.3	L50	L90
1	67.9	73.7	59.1	70.5	67.	63.5
2	66.2	73.7	61.7	67.5	65.5	63.5
3	62.2	77.0	57.0	63.0	61.0	59.5
4	72.3	78.4	66.4	73.5	72.0	70.0
5	56.6	72.6	51.2	58.0	55.5	53.5
6	60.0	64.2	56.4	61.5	59.5	58.0
7	53.0	68.8	40.0	56.5	49.5	44.5
8	57.5	72.7	45.8	60.5	55.0	49.5
9	67.8	93.2	46.1	62.0	58.5	54.0
10	52.9	71.0	42.7	56.0	50.0	46.0
11	60.8	73.8	46.4	64.5	58.5	52.5
12	64.3	89.0	39.0	65.5	48.0	41.0
13	56.9	76.5	44.3	60.5	54.0	48.0
14	69.7	84.3	52.2	72.5	68.0	60.0
15	48.9	64.0	43.2	51.5	46.0	44.0
16	53.1	68.8	38.6	58.0	43.0	40.0
17	60.7	69.8	45.6	65.0	58.5	51.0
18	65.9	79.4	43.4	70.5	61.5	51.0
19	59.1	70.6	41.8	62.5	57.0	48.5
20	68.7	84.1	47.2	72.5	66.0	55.5
21	47.9	64.5	38.2	50.5	41.5	40.0

Source: Mestre Greve Associates 2010c.

Existing Traffic Noise Levels

Projected highway noise levels were computed using the Highway Noise Model published by the Federal Highway Administration (“FHWA Highway Traffic Noise Prediction Model,” FHWA-RD-77-108, December, 1978). The FHWA Model uses traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute the “equivalent noise level.” A computer code has been written which computes equivalent noise levels for each of the time periods used in the calculation of CNEL. Weighting these noise levels and summing them results in the CNEL for the traffic projections used. CNEL contours are found by iterating over many distances until the distances to the 55, 60, 65, and 70 CNEL contours are found. For the roadway analysis, worst-case assumptions about future motor vehicle traffic and noise levels have been made and were incorporated in the modeling effort. Specifically, no reductions in motor vehicle noise have been assumed in spite of legislation requiring quieter vehicles at the time of manufacture.

Traffic volumes and estimated speeds were used with the FHWA Model to estimate the noise levels in terms of CNEL. Soft site conditions were assumed. Existing traffic volumes for arterials utilized were obtained from the traffic study (Appendix H). The distances to the CNEL contours from the roadway centerlines are shown in Table 4.12-7. Note that the values given in the table do not take into account the effect of any noise barriers or topography that may affect ambient noise levels. Table 4.12-7 shows the major noise corridors occur along Vineyard Avenue, Haven Avenue, and Milliken Avenue. Other lesser noise corridors within the boundaries of the City are also included in the table.

**TABLE 4.12-7
MODELED EXISTING ROADWAY NOISE LEVELS**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
19th Street					
City Border To Carnelian Street	67.8	715	332	154	71
Carnelian Street To Hellman Avenue	68.3	767	356	165	77
Hellman Avenue To Archibald Avenue	68.1	751	348	162	75
Archibald Avenue To Hermosa Avenue	67.7	698	324	150	70
Base Line Road					
City Border To Carnelian Street	69.4	910	422	196	91
Carnelian Street To Hellman Avenue	69.4	915	425	197	92
Hellman Avenue To Archibald Avenue	69.9	987	458	213	99
Archibald Avenue To Hermosa Avenue	69.6	939	436	202	94
Hermosa Avenue To Haven Avenue	70.3	1,049	487	226	105
Base Line Road					
Haven Avenue To Spruce Avenue	70.5	1,072	498	231	107
Spruce Avenue To Milliken Avenue	71.2	1,200	557	259	120
Milliken Avenue To Rochester Avenue	70.6	1,102	512	237	110
Victoria Park Lane To Etiwanda Avenue	70.4	1,071	497	231	107
Etiwanda Avenue To East Avenue	70.9	1,144	531	247	114
East Avenue To Americana Way	72.5	1,470	682	317	147
Americana Way To Cherry Avenue	71.7	1,291	599	278	129
Foothill Boulevard					
Campus Avenue To Grove Avenue	71.2	1,195	555	257	120
Grove Avenue To Baker Avenue	72.1	1,386	643	299	139
Baker Avenue To Vineyard Avenue	72.0	1,360	631	293	136
Vineyard Avenue To Hellman Avenue	71.6	1,282	595	276	128
Hellman Avenue To Archibald Avenue	71.9	1,342	623	289	134
Archibald Avenue To Hermosa Avenue	71.6	1,279	593	275	128
Hermosa Avenue To Haven Avenue	71.2	1,198	556	258	120
Haven Avenue To Spruce Avenue	72.3	1,427	662	307	143
Spruce Avenue To Milliken Avenue	72.5	1,458	677	314	146
Milliken Avenue To Rochester Avenue	73.6	1,744	809	376	174
Day Creek Boulevard To I-15 Freeway	75.1	2,198	1,020	473	220
I-15 Freeway To Etiwanda Avenue	72.3	1,415	657	305	142
Etiwanda Avenue To East Avenue	72.1	1,389	645	299	139
Arrow Highway					
Campus Avenue To Grove Avenue	64.5	431	200	93	43
Grove Avenue To Baker Avenue	67.9	723	335	156	72
Baker Avenue To Vineyard Avenue	68.9	851	395	183	85
Vineyard Avenue To Hellman Avenue	69.1	869	404	187	87
Hellman Avenue To Archibald Avenue	69.5	920	427	198	92
Archibald Avenue To Hermosa Avenue	71.4	1,239	575	267	124
Hermosa Avenue To Haven Avenue	71.6	1,288	598	277	129
Haven Avenue To Milliken Avenue	71.5	1,266	588	273	127
Milliken Avenue To Rochester Avenue	71.0	1,163	540	251	116

TABLE 4.12-7 (Continued)
MODELED EXISTING ROADWAY NOISE LEVELS

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Rochester Avenue To Etiwanda Avenue	71.0	1,167	542	251	117
Etiwanda Avenue To East Avenue	69.3	900	418	194	90
4th Street					
Hellman Avenue To Archibald Avenue	69.4	917	426	198	92
Archibald Avenue To Hermosa Avenue	69.3	900	418	194	90
Haven Avenue To Milliken Avenue	72.5	1,459	677	314	146
Milliken Avenue To I-15 Freeway	72.6	1,496	694	322	150
Grove Avenue					
14th Street To Foothill Boulevard	63.0	341	159	74	34
Foothill Boulevard To Arrow Highway	67.9	726	337	156	73
Arrow Highway To 8th Street	68.1	746	346	161	75
Vineyard Avenue/Carnelian Street					
Lemon Avenue To SR-210 Freeway	70.2	1,035	481	223	104
SR-210 Freeway To 19th Street	71.3	1,223	568	264	122
19th Street To Base Line Road	71.6	1,285	596	277	128
Vineyard Avenue/Carnelian Street					
Base Line Road To Red Hill Country Club Drive	70.9	1,141	530	246	114
Red Hill Country Club Drive To Foothill Boulevard	72.2	1,412	655	304	141
Foothill Boulevard To Arrow Highway	71.1	1,189	552	256	119
Arrow Highway To 8th Street	70.8	1,138	528	245	114
Archibald Avenue					
Lemon Avenue To SR-210 Freeway	68.5	790	367	170	79
SR-210 Freeway To 19th Street	71.2	1,211	562	261	121
19th Street To Base Line Road	70.2	1,028	477	222	103
Base Line Road To Church Street	70.6	1,102	511	237	110
Church Street To Foothill Boulevard	70.5	1,085	504	234	109
Foothill Boulevard To Arrow Highway	71.1	1,179	547	254	118
Arrow Highway To 8th Street	71.6	1,282	595	276	128
6th Street To 4th Street	71.9	1,342	623	289	134
4th Street To Inland Empire Boulevard	71.6	1,269	589	273	127
Haven Avenue					
Lemon Avenue To SR-210 Freeway	73.4	1,694	786	365	169
SR-210 Freeway To 19th Street	72.2	1,412	655	304	141
19th Street To Base Line Road	73.4	1,694	786	365	169
Base Line Road To Church Street	72.7	1,506	699	324	151
Church Street To Foothill Boulevard	72.7	1,522	707	328	152
Foothill Boulevard To Arrow Highway	72.8	1,549	719	334	155
Arrow Highway To 8th Street	73.3	1,648	765	355	165

TABLE 4.12-7 (Continued)
MODELED EXISTING ROADWAY NOISE LEVELS

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Milliken Avenue					
Banyan Street To SR-210 Freeway	69.5	926	430	199	93
SR-210 Freeway To Victoria Park Lane	72.7	1,506	699	324	151
Victoria Park Lane To Base Line Road	72.6	1,499	696	323	150
Base Line Road To Terra Vista Parkway	72.3	1,419	659	306	142
Terra Vista Parkway To Foothill Boulevard	72.3	1,433	665	309	143
Foothill Boulevard To Arrow Highway	73.2	1,641	762	354	164
Arrow Highway To 6th Street	73.7	1,753	814	378	175
6th Street To 4th Street	73.8	1,798	835	387	180
4th Street To Inland Empire Boulevard	72.9	1,573	730	339	157
Rochester Avenue					
Foothill Boulevard To Arrow Highway	70.0	998	463	215	100
Arrow Highway To 6th Street	69.3	891	414	192	89
Day Creek Boulevard					
Banyan Street To SR-210 Freeway	69.5	928	431	200	93
SR-210 Freeway To Highland Avenue	71.9	1,339	621	288	134
Etiwanda Avenue					
Victoria Street To Base Line Road	65.1	468	217	101	47
Base Line Road To Miller Avenue	68.0	731	339	157	73
Miller Avenue To Foothill Boulevard	68.1	747	347	161	75
Foothill Boulevard To Arrow Highway	70.2	1,024	475	221	102
Arrow Highway To City Boundary	70.3	1,052	488	227	105
East Avenue					
Victoria Street To Base Line Road	65.6	507	236	109	51
Base Line Road To Miller Avenue	65.6	512	238	110	51
Americana Way					
North of Base Line Road	59.6	203	94	44	20
South of Base Line Road	61.5	272	126	59	27
Beach Avenue					
Cherry Avenue To I-15 Freeway	67.8	711	330	153	71
I-15 Freeway To SR-210 Freeway	68.1	742	344	160	74
I-15 Freeway					
Wilson Avenue To SR-210 Freeway	78.0	3,425	1,590	738	342
SR-210 Freeway To Base Line Road	78.8	3,838	1,781	827	384
Base Line Road To Foothill Boulevard	79.3	4,154	1,928	895	415
Foothill Boulevard To Arrow Highway	80.6	5,099	2,367	1,099	510
Arrow Highway To San Bernardino Avenue	80.1	4,712	2,187	1,015	471

**TABLE 4.12-7 (Continued)
MODELED EXISTING ROADWAY NOISE LEVELS**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
SR-210 Freeway					
City Border To Carnelian Street	80.6	5,106	2,370	1,100	511
Carnelian Street To Archibald Avenue	80.4	4,950	2,297	1,066	495
Archibald Avenue To Haven Avenue	80.4	4,947	2,296	1,066	495
Haven Avenue To Milliken Avenue	80.0	4,677	2,171	1,008	468
Milliken Avenue To Day Creek Boulevard	80.0	4,653	2,160	1,002	465
Day Creek Boulevard To I-15 Freeway	79.7	4,423	2,053	953	442
† From roadway centerline RW – Noise contour falls within roadway right-of-way. Source: Mestre Greve Associates 2010c.					

Existing Aircraft Noise Levels

The closest major airport to Rancho Cucamonga is the LA/Ontario International Airport, which is located to the south of the City. At its closest distance, the LA/Ontario International Airport is approximately one mile from the City of Rancho Cucamonga’s southern border. According to most recent noise contour (4th Quarter 2007 at Los Angeles World Airports), the proposed 2010 General Plan Update Study Area is well outside the LA/Ontario International Airport’s 65 dBA CNEL noise contour. Aircraft noise does not significantly impact the City of Rancho Cucamonga.

Existing Railroad Noise Levels

The Alameda Corridor East is the main east/west rail line passing through San Bernardino County. The rail line serves about 140 trains per day. The Alameda Corridor East does not pass through the City of Rancho Cucamonga; rather, it exists approximately 4,400 feet south of the City of Rancho Cucamonga’s southern border. The modeled train noise impact to the City of Rancho Cucamonga is estimated to be less than 65 CNEL.

Metrolink and BNSF trains also pass through the City of Rancho Cucamonga via two railroad tracks that are parallel and adjacent to 8th Street. Metrolink trains run on one of the tracks, and BNSF trains run on the other track. Currently, there are a total of 38 Metrolink trains that pass through the City of Rancho Cucamonga on a daily basis. The majority of the scheduled train operations occur during the daytime hours (7 AM to 7 PM), with less than one third of the total daily operations occurring during the evening and nighttime periods. It is estimated that roughly 2 BNSF freight trains run through the City during daytime hours. The noise level near the railroad tracks depends upon a number of train-related factors, with the absence or presence of train horn noise being one such factor. Trains blow their horns when approaching railroad crossings, so at a given constant distance away from the railroad tracks, those portions along the railroad track that are near railroad crossings tend to be louder than other portions of the railroad tracks that are farther away from railroad crossings. The modeled existing CNEL noise level due to both Metrolink and BNSF train operations along the railroad tracks near railroad crossings can be as high as 81.6 dBA at 50 feet from the center of the two tracks. At other portions along the railroad track away from the railroad crossings, it is estimated that the CNEL noise level is as low as 67.1 dBA at 50 feet from the tracks.

4.12.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist Form included as Appendix G of the CEQA Guidelines. The proposed 2010 General Plan Update would have a potentially significant adverse impact related to noise if it would:

- Threshold 4.12a** Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Threshold 4.12b** Expose people or structures to or generation of excessive groundborne vibration or groundborne noise levels;
- Threshold 4.12c** Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Threshold 4.12d** Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Threshold 4.12e** Expose people residing or working in the project area to excessive noise levels, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport; and/or
- Threshold 4.12f** Expose people residing or working in the project area to excessive noise levels, for a project within the vicinity of a private airstrip.

For purposes of analysis, the City's noise ordinance contained in the City of Rancho Cucamonga Municipal Code is used in determining levels of significance for noise impacts in this PEIR. This analysis has gone further and has also identified any noise increases of 1 dB or greater as being potentially significant when they impact a sensitive land use, such as a residential area.

4.12.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address noise issues. Implementation of these goals and policies and their corresponding implementation actions would reduce noise impacts to existing and future developments. These include:

PS-13.1: Consider the compatibility of proposed land uses with the noise environment when preparing or revising community and/or specific plans and when reviewing development proposals. The contour map depicting future noise levels (Figure PS-10) should be used by the City as a guide to land use/noise compatibility.

Implementation Action: *Review and modify land use and zoning exhibits where possible to eliminate incompatible noise conflicts, and utilize the adopted General Plan noise maps in the development review process.*

PS-13.2: Consider noise impacts as part of the development review process, particularly the location of parking, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.

Implementation Action: Continue to assess potential noise conflicts within development proposals as part of the development review process. Require noise assessments as appropriate for projects that have the potential to produce excessive or unusual noise.

PS-13.3: Consider the use of noise barriers or walls to reduce noise levels generated by ground transportation noise sources and industrial sources.

Implementation Action: Establish criteria to address the use of and design of structures proposed as noise barriers within development proposals.

PS-13.4: Require that acceptable noise levels are maintained near residences, schools, health care facilities, religious institutions, and other noise sensitive uses in accordance with the Development Code and noise standards contained in the General Plan.

Implementation Action: Utilize the preparation of noise technical studies and recommended mitigation measures for development proposals with potential noise impacts or conflicts with existing noise-sensitive uses.

PS-13.5: Limit the hours of operation at noise generating sources that are adjacent to noise-sensitive uses, wherever practical.

Implementation Action: Utilize the preparation of noise technical studies and recommended mitigation measures for development proposals with potential noise impacts or conflicts with existing noise-sensitive uses.

PS-13.6: Implement appropriate standard construction noise controls for all construction projects.

Implementation Action: Continue to enforce the City's noise regulations for construction and maintenance activities.

PS-13.7: Require all exterior noise sources (construction operations, air compressors, pumps, fans, and leaf blowers) to use available noise suppression devices and techniques to bring exterior noise levels down to acceptable levels.

Implementation Action: Continue to enforce the City's noise regulations for construction and maintenance activities.

PS-13.8: Require that mixed-use structures be designed to account for noise from adjacent uses.

Implementation Action: Utilize the preparation of noise technical studies and recommended mitigation measures for development proposals with potential noise impacts or conflicts with existing noise-sensitive uses.

PS-13.9: Provide, as appropriate, funding to monitor noise levels and investigate noise complaints.

Implementation Action: Evaluate the feasibility of providing training, personnel, and equipment to enforce noise regulations and investigate noise complaints.

PS-13.10: Provide education to the community at large about the importance of maintaining a healthy noise environment, and identify ways residents can assist in noise abatement efforts.

Implementation Action: *Provide educational materials regarding the impacts associated with noise disturbances to residents and businesses as part of a comprehensive code enforcement outreach.*

PS-13.11: Continue to work with the surrounding communities to allow for compliance with Rancho Cucamonga's land use and noise compatibility goals and objectives at the City's boundaries.

Implementation Action: *Continue to engage inter-jurisdictional review of development proposals in order to identify impacts and include mitigation.*

PS-14.1: Consult with Caltrans and other regional agencies to minimize the impact of transportation-related noise, including noise associated with freeways, major arterials, and rail lines.

Implementation Action: *Monitor residents' complaints of transportation-related noise. Take actions as deemed appropriate to address excessive noise issues with the responsible agency or rail operator.*

PS-14.2: Require development that is, or will be, affected by railroad noise to include appropriate measures to minimize adverse noise effects on residents businesses.

Implementation Action: *Monitor residents' complaints of transportation-related noise. Take actions as deemed appropriate to address excessive noise issues with the responsible agency or rail operator.*

4.12.5 STANDARD CONDITIONS OF APPROVAL

Existing regulations address stationary noise sources and their impacts on adjacent land uses. Compliance by future development and redevelopment with these standard conditions would reduce noise impacts and prevent excessive noise levels in the City. These include those Standard Conditions of Approval (SCs) listed below.

SC 4.12-1 Prior to approval of grading plans and/or prior to issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall not occur between the hours of 8:00 PM and 6:30 AM and on Sundays and national holidays. This requirement is identified under item 4 of the Special Provisions paragraph in Chapter 17.02.120 of the Municipal Code.

SC 4.12-2 Future development and redevelopment in the City shall comply with Section 17.02.120 of the City of Rancho Cucamonga's Municipal Code, which sets limits for interior and exterior noise levels.

SC 4.12-3 Future development and redevelopment in the City shall comply with Title 24 of the California Administrative Code, which requires that residential structures (other than detached single-family dwellings) be designed such that the interior community noise equivalent level (CNEL) with windows closed shall not exceed 45 A-weighted decibels (dBA) in any habitable room.

4.12.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment under the proposed 2010 General Plan Update would generate new vehicle trips and stationary noise sources that could increase existing noise levels in and near the City.

Noise Levels and Vibration

- Threshold 4.12a** **Would the proposed General Plan Update expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**
- Threshold 4.12b** **Would the proposed General Plan Update expose people or structures to or generation of excessive groundborne vibration or groundborne noise levels?**
- Threshold 4.12c** **Would the proposed General Plan Update result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**
- Threshold 4.12d** **Would the proposed General Plan Update result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Construction activities for future development and redevelopment under the proposed 2010 General Plan Update and any noise-generating activities associated with the operation of future development and redevelopment would be required to meet the Noise Ordinance standards. Inability to comply with the restrictions in the Noise Ordinance and 2010 General Plan Update Noise/Land Use Compatibility standards would result in a significant impact.

Construction (Short-Term) Noise

The 2010 General Plan Update would facilitate the completion of various construction projects at numerous locations throughout the City. These projects have the potential to occur in any zoned area, including residential, commercial/office, industrial and mixed-use areas. It is premature to know when and where specific construction might occur, and therefore, potential impacts may only be addressed in a generic manner.

Construction activity generates noise that has a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators, can reach high levels and have the potential to impact nearby sensitive land uses.

Every construction project that is planned within the City would be subject to the standards in the Noise Ordinance. The construction noise impacts to a particular neighborhood are dependent upon a number of factors specific to the project. Some of the factors include proximity to sensitive land use, time of day, intervening barriers, level of construction (i.e., number and type of construction equipment that is operating simultaneously), and the duration of the project's construction phase.

Worst-case examples of construction noise at 50 feet are presented in Exhibit 4.12-2, Typical Construction Equipment Noise Levels. The peak noise level for most of the equipment that

would be used during construction is in the range of 70 to 95 dBA at a distance of 50 feet. Noise levels at further distances are less.

Those projects that are planned to occur near residential or mixed-use neighborhoods tend to be at the highest risk for causing noise impacts because the distance from construction activity to sensitive land uses is least in those neighborhoods, and also because residential neighborhoods have the lowest noise standard thresholds. Without knowing the details of future projects under the proposed 2010 General Plan Update, only a rough estimate of the construction noise impacts can be made. For a typical construction project that is as close as 50 feet from residential land uses, the worst-case unmitigated peak construction noise levels would be as high as 95 dBA. The average noise levels are typically 5 to 15 dB lower than the peak noise levels, so average noise levels (Leq) at the nearest residences would be in the range of 85 dBA (Leq). These noise levels would be in excess of that which is permitted by the Noise Ordinance. Construction activity would be closer than 50 feet, in which case the noise impacts would be even greater. Projects that are farther away than 50 feet from sensitive land uses can still generate noise levels that exceed the noise standard thresholds.

The Rancho Cucamonga Noise Ordinance exempts construction noise that occurs between the hours of 6:30 AM and 8:00 PM on any day except Sundays and national holidays if the noise level does not exceed the noise level specified by Table 4.12-1, where the basic noise level used to determine the noise threshold is 65 dBA. This means that for non-impulsive noise, the L25 has to be less than 65 dBA, the L16.7 has to be less than 70 dBA, the L8.3 has to be less than 79 dBA, and Lmax has to be less than 80 dBA. Construction noise impacts may exceed one or more of these noise limits.

Policy PS-13.6 calls for noise controls during construction. Policy PS-13.7 requires mitigation of all exterior noise sources, including construction activities.

The determination of whether or not a particular project would violate the noise standards would need to be analyzed on a case-by-case basis. If any of these noise thresholds are violated for unmitigated noise levels, appropriate mitigation measures would have to be designed to bring the noise level down to an acceptable level. These include development and implementation of a noise mitigation plan for construction activities near noise sensitive receptors and designation of haul routes for construction equipment and trucks that divert construction traffic from residential areas and noise-sensitive land uses. Projects that use an inordinate amount of construction equipment, or are located close to sensitive land uses have the potential to produce noise levels that violate these noise standards; however, if a project complies with the Noise Ordinance and City Noise Standards (SC 4.12-1 through 4.12-3) and MMs 4.12-1 through 4.12-4 are implemented, construction noise impacts would be reduced to a less than significant level.

Operational (Long-Term) Noise

The proposed 2010 General Plan Update largely provides for a continuation of established land use patterns, with the exception of introducing mixed-use developments along Foothill Boulevard. In addition, intensification of uses would occur as development continues among infill sites. Increased traffic along the roadways in the City would increase the traffic noise level at land uses near the roadways experiencing the increased traffic flow.

Traffic Noise Impacts

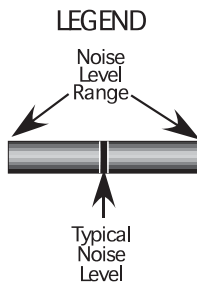
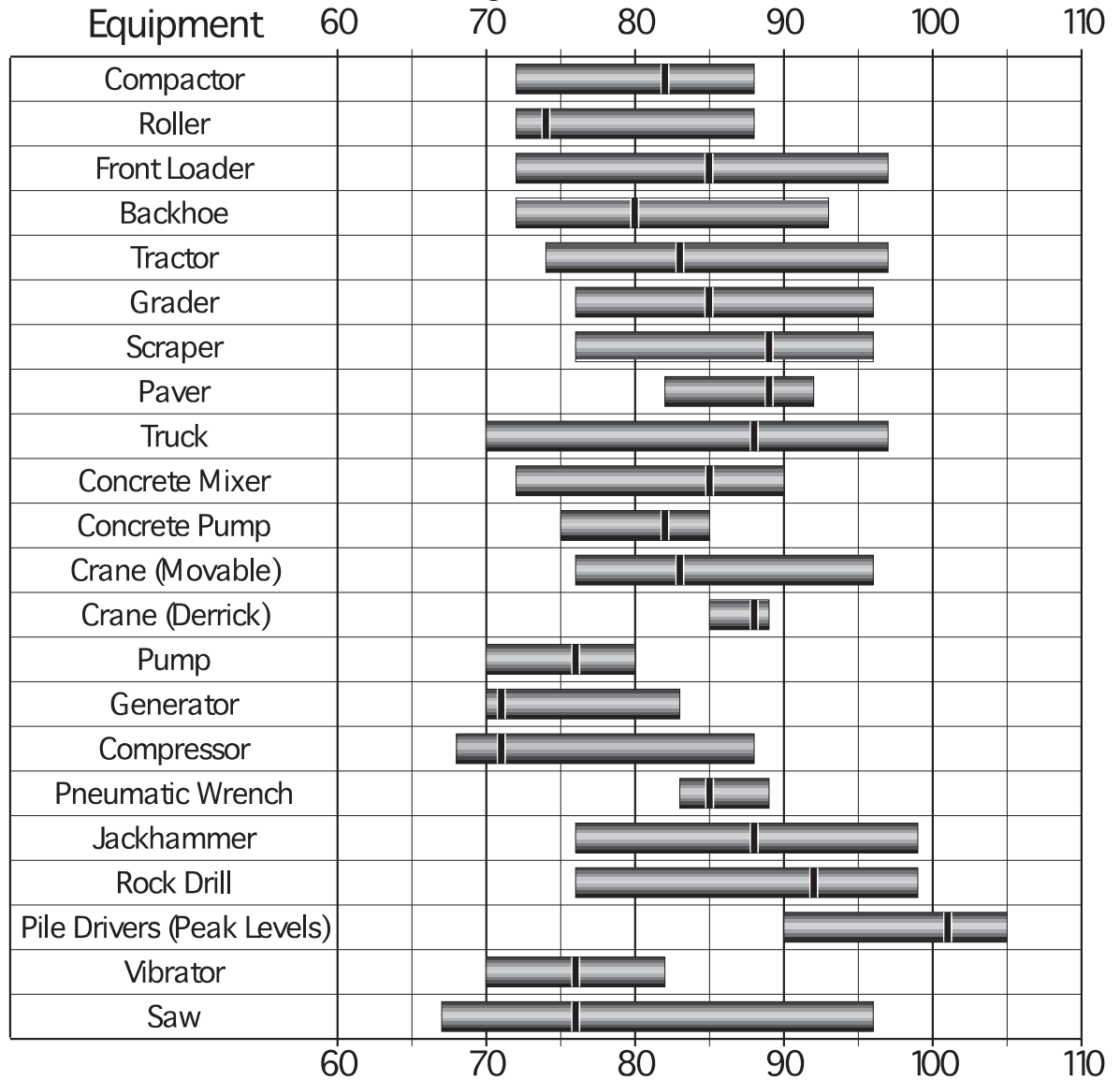
Table 4.12-8 shows the projected noise levels at buildout of the 2010 General Plan Update Study Area by 2030. These noise levels were estimated using soft site conditions. The table

shows the CNEL noise level at 100 feet from the centerline of the roadway for each of the roadway segment as well as the distance to the 55, 60, 65 and 70 CNEL noise contours. These contours do not take into account the effect of any noise barriers or topography that may reduce traffic noise levels.

**TABLE 4.12-8
FUTURE 2030 WITH PROJECT TRAFFIC NOISE LEVELS**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
19th Street					
City Border To Carnelian Street	69.4	913	424	197	91
Carnelian Street To Hellman Avenue	69.3	899	417	194	90
Hellman Avenue To Archibald Avenue	69.2	888	412	191	89
Archibald Avenue To Hermosa Avenue	68.4	782	363	169	78
Base Line Road					
City Border To Carnelian Street	71.4	1,236	574	266	124
Carnelian Street To Hellman Avenue	70.3	1,047	486	226	105
Hellman Avenue To Archibald Avenue	70.5	1,073	498	231	107
Archibald Avenue To Hermosa Avenue	70.0	1,001	465	216	100
Hermosa Avenue To Haven Avenue	71.2	1,195	555	257	120
Haven Avenue To Spruce Avenue	71.2	1,195	555	257	120
Spruce Avenue To Milliken Avenue	72.2	1,392	646	300	139
Milliken Avenue To Rochester Avenue	71.7	1,291	599	278	129
Victoria Park Lane To Etiwanda Avenue	71.8	1,319	612	284	132
Etiwanda Avenue To East Avenue	72.2	1,402	651	302	140
East Avenue To Americana Way	72.9	1,565	726	337	156
Americana Way To Cherry Avenue	72.1	1,374	638	296	137
Foothill Boulevard					
Campus Avenue To Grove Avenue	71.7	1,303	605	281	130
Grove Avenue To Baker Avenue	72.5	1,478	686	318	148
Baker Avenue To Vineyard Avenue	72.9	1,556	722	335	156
Vineyard Avenue To Hellman Avenue	72.8	1,534	712	331	153
Foothill Boulevard					
Hellman Avenue To Archibald Avenue	73.1	1,597	741	344	160
Archibald Avenue To Hermosa Avenue	72.7	1,503	698	324	150
Hermosa Avenue To Haven Avenue	72.0	1,357	630	292	136
Haven Avenue To Spruce Avenue	73.7	1,772	823	382	177
Spruce Avenue To Milliken Avenue	73.5	1,718	797	370	172
Milliken Avenue To Rochester Avenue	74.7	2,044	949	440	204
Day Creek Boulevard To I-15 Freeway	75.5	2,342	1,087	505	234
I-15 Freeway To Etiwanda Avenue	74.7	2,049	951	441	205
Etiwanda Avenue To East Avenue	74.3	1,932	897	416	193

A-Weighted Sound Level (dBA) At 50 Feet



Typical Construction Equipment Noise Levels

Exhibit 4.12-2

Rancho Cucamonga General Plan Update

Source: Mestre Greve Associates



TABLE 4.12-8 (Continued)
FUTURE 2030 WITH PROJECT TRAFFIC NOISE LEVELS

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Arrow Highway					
Campus Avenue To Grove Avenue	65.6	505	235	109	51
Grove Avenue To Baker Avenue	68.3	773	359	167	77
Baker Avenue To Vineyard Avenue	69.6	942	437	203	94
Vineyard Avenue To Hellman Avenue	69.8	966	449	208	97
Hellman Avenue To Archibald Avenue	70.2	1,032	479	222	103
Archibald Avenue To Hermosa Avenue	71.8	1,321	613	285	132
Hermosa Avenue To Haven Avenue	72.2	1,392	646	300	139
Haven Avenue To Milliken Avenue	72.0	1,351	627	291	135
Milliken Avenue To Rochester Avenue	72.6	1,480	687	319	148
Rochester Avenue To Etiwanda Avenue	74.8	2,099	974	452	210
Etiwanda Avenue To East Avenue	70.2	1,028	477	221	103
4th Street					
Hellman Avenue To Archibald Avenue	72.1	1,371	636	295	137
Archibald Avenue To Hermosa Avenue	72.0	1,357	630	292	136
Haven Avenue To Milliken Avenue	73.6	1,746	810	376	175
Milliken Avenue To I-15 Freeway	73.6	1,725	801	372	173
Grove Avenue					
14th Street To Foothill Boulevard	63.5	370	172	80	37
Foothill Boulevard To Arrow Highway	68.3	773	359	167	77
Arrow Highway To 8th Street	68.8	838	389	180	84
Vineyard Avenue/Carnelian Street					
Lemon Avenue To SR-210 Freeway	70.6	1,102	511	237	110
SR-210 Freeway To 19th Street	71.8	1,324	614	285	132
19th Street To Base Line Road	72.3	1,429	663	308	143
Base Line Road To Red Hill Country Club Drive	71.8	1,327	616	286	133
Red Hill Country Club Drive To Foothill Boulevard	73.1	1,600	743	345	160
Foothill Boulevard To Arrow Highway	71.8	1,321	613	285	132
Arrow Highway To 8th Street	72.0	1,354	628	292	135
Archibald Avenue					
Lemon Avenue To SR-210 Freeway	68.9	843	391	182	84
SR-210 Freeway To 19th Street	71.7	1,291	599	278	129
19th Street To Base Line Road	71.4	1,245	578	268	124
Base Line Road To Church Street	72.1	1,377	639	297	138
Church Street To Foothill Boulevard	71.5	1,266	588	273	127
Foothill Boulevard To Arrow Highway	72.3	1,429	663	308	143
Arrow Highway To 8th Street	72.5	1,467	681	316	147
6th Street To 4th Street	72.8	1,545	717	333	155
4th Street To Inland Empire Boulevard	72.4	1,441	669	310	144

TABLE 4.12-8 (Continued)
FUTURE 2030 WITH PROJECT TRAFFIC NOISE LEVELS

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Haven Avenue					
Lemon Avenue To SR-210 Freeway	75.0	2,160	1,003	465	216
SR-210 Freeway To 19th Street	74.0	1,844	856	397	184
19th Street To Base Line Road	74.5	1,995	926	430	199
Base Line Road To Church Street	73.9	1,828	849	394	183
Church Street To Foothill Boulevard	74.3	1,932	897	416	193
Foothill Boulevard To Arrow Highway	75.3	2,258	1,048	487	226
Arrow Highway To 8th Street	75.4	2,288	1,062	493	229
Milliken Avenue					
Banyan Street To SR-210 Freeway	70.8	1,125	522	242	113
SR-210 Freeway To Victoria Park Lane	73.1	1,606	746	346	161
Victoria Park Lane To Base Line Road	73.4	1,691	785	364	169
Base Line Road To Terra Vista Parkway	73.2	1,641	762	354	164
Terra Vista Parkway To Foothill Boulevard	73.7	1,768	821	381	177
Foothill Boulevard To Arrow Highway	74.1	1,888	876	407	189
Arrow Highway To 6th Street	74.1	1,867	867	402	187
6th Street To 4th Street	74.2	1,917	890	413	192
4th Street To Inland Empire Boulevard	73.4	1,675	778	361	168
Rochester Avenue					
Foothill Boulevard To Arrow Highway	72.6	1,486	690	320	149
Arrow Highway To 6th Street	70.6	1,092	507	235	109
Day Creek Boulevard					
Banyan Street To SR-210 Freeway	69.9	987	458	213	99
SR-210 Freeway To Highland Avenue	72.3	1,427	662	307	143
Etiwanda Avenue					
Victoria Street To Base Line Road	66.5	587	272	126	59
Base Line Road To Miller Avenue	68.7	813	377	175	81
Miller Avenue To Foothill Boulevard	69.3	895	415	193	90
Foothill Boulevard To Arrow Highway	70.9	1,152	535	248	115
Arrow Highway To City Boundary	71.0	1,172	544	253	117
East Avenue					
Victoria Street To Base Line Road	67.7	698	324	150	70
Base Line Road To Miller Avenue	66.7	604	281	130	60
Americana Way					
North of Base Line Road	60.4	230	107	50	23
South of Base Line Road	62.0	292	135	63	29
Beach Avenue					
Cherry Avenue To I-15 Freeway	70.3	1,042	484	224	104
I-15 Freeway To SR-210 Freeway	70.8	1,130	524	243	113
I-15 Freeway					
Wilson Avenue To SR-210 Freeway	80.7	5,181	2,405	1,116	518
SR-210 Freeway To Base Line Road	80.9	5,327	2,472	1,148	533
Base Line Road To Foothill Boulevard	81.2	5,554	2,578	1,197	555

**TABLE 4.12-8 (Continued)
FUTURE 2030 WITH PROJECT TRAFFIC NOISE LEVELS**

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foothill Boulevard To Arrow Highway	81.2	5,554	2,578	1,197	555
Arrow Highway To San Bernardino Avenue	82.1	6,375	2,959	1,373	637
SR-210 Freeway					
City Border To Carnelian Street	81.5	5,822	2,702	1,254	582
Carnelian Street To Archibald Avenue	81.5	5,865	2,723	1,264	587
Archibald Avenue To Haven Avenue	81.5	5,832	2,707	1,256	583
Haven Avenue To Milliken Avenue	81.3	5,652	2,623	1,218	565
Milliken Avenue To Day Creek Boulevard	81.3	5,705	2,648	1,229	571
Day Creek Boulevard To I-15 Freeway	81.3	5,629	2,613	1,213	563
Source: Mestre Greve Associates 2010c.					

Traffic volumes were compared in order to determine potential traffic noise increases. The traffic study (Appendix H) provided traffic volumes for both existing conditions and the projected traffic volumes for the year 2030 buildout under the proposed 2010 General Plan Update. Table 4.12-9 shows the expected incremental traffic noise level increases on adjacent roadways. The last column, "Neighborhood Impacted", identifies the land uses along roadway segments that are projected to experience a noise increase of 1 dB or more.

**TABLE 4.12-9
TRAFFIC NOISE CNEL INCREASES IN 2030**

Roadway Segment	Impact (dB)	Impacted Neighborhood
19th Street		
City Border To Carnelian Street	1.6	Residential
Carnelian Street To Hellman Avenue	1.0	Residential, Retail
Hellman Avenue To Archibald Avenue	1.1	Residential
Archibald Avenue To Hermosa Avenue	0.7	
Base Line Road		
City Border To Carnelian Street	2.0	Residential
Carnelian Street To Hellman Avenue	0.9	
Hellman Avenue To Archibald Avenue	0.5	
Archibald Avenue To Hermosa Avenue	0.4	
Hermosa Avenue To Haven Avenue	0.9	
Haven Avenue To Spruce Avenue	0.7	
Spruce Avenue To Milliken Avenue	1.0	Residential
Milliken Avenue To Rochester Avenue	1.0	Residential
Victoria Park Lane To Etiwanda Avenue	1.4	Residential
Etiwanda Avenue To East Avenue	1.3	Residential
East Avenue To Americana Way	0.4	
Americana Way To Cherry Avenue	0.4	

**TABLE 4.12-9 (Continued)
TRAFFIC NOISE CNEL INCREASES IN 2030**

Roadway Segment	Impact (dB)	Impacted Neighborhood
Foothill Boulevard		
Campus Avenue To Grove Avenue	0.6	
Grove Avenue To Baker Avenue	0.4	
Baker Avenue To Vineyard Avenue	0.9	
Vineyard Avenue To Hellman Avenue	1.2	Residential
Hellman Avenue To Archibald Avenue	1.1	Residential
Archibald Avenue To Hermosa Avenue	1.1	Residential
Hermosa Avenue To Haven Avenue	0.8	
Haven Avenue To Spruce Avenue	1.4	Residential
Spruce Avenue To Milliken Avenue	1.1	Residential
Milliken Avenue To Rochester Avenue	1.0	Residential
Day Creek Boulevard To I-15 Freeway	0.4	
I-15 Freeway To Etiwanda Avenue	2.4	Residential
Etiwanda Avenue To East Avenue	2.1	Residential
Arrow Highway		
Campus Avenue To Grove Avenue	1.0	Residential
Grove Avenue To Baker Avenue	0.4	
Baker Avenue To Vineyard Avenue	0.7	
Vineyard Avenue To Hellman Avenue	0.7	
Hellman Avenue To Archibald Avenue	0.7	
Archibald Avenue To Hermosa Avenue	0.4	
Hermosa Avenue To Haven Avenue	0.5	
Arrow Highway		
Haven Avenue To Milliken Avenue	0.4	
Milliken Avenue To Rochester Avenue	1.6	Industrial, Ball Park
Rochester Avenue To Etiwanda Avenue	3.8	Office, Industrial
Etiwanda Avenue To East Avenue	0.9	
4th Street		
Hellman Avenue To Archibald Avenue	2.6	Residential
Archibald Avenue To Hermosa Avenue	2.7	Residential, Industrial
Haven Avenue To Milliken Avenue	1.2	Residential
Milliken Avenue To I-15 Freeway	0.9	
Grove Avenue		
14th Street To Foothill Boulevard	0.5	
Foothill Boulevard To Arrow Highway	0.4	
Arrow Highway To 8th Street	0.8	
Vineyard Avenue/Carnelian Street		
Lemon Avenue To SR-210 Freeway	0.4	
SR-210 Freeway To 19th Street	0.5	
19th Street To Base Line Road	0.7	
Base Line Road To Red Hill Country Club Drive	1.0	Residential
Red Hill Country Club Drive To Foothill Boulevard	0.8	

**TABLE 4.12-9 (Continued)
TRAFFIC NOISE CNEL INCREASES IN 2030**

Roadway Segment	Impact (dB)	Impacted Neighborhood
Foothill Boulevard To Arrow Highway	0.7	
Arrow Highway To 8th Street	1.1	Offices, Industrial
Archibald Avenue		
Lemon Avenue To SR-210 Freeway	0.4	
SR-210 Freeway To 19th Street	0.4	
19th Street To Base Line Road	1.2	Residential
Base Line Road To Church Street	1.5	Residential
Church Street To Foothill Boulevard	1.0	Residential, Retail
Foothill Boulevard To Arrow Highway	1.3	Residential, School, Commercial
Arrow Highway To 8th Street	0.9	
6th Street To 4th Street	0.9	
4th Street To Inland Empire Boulevard	0.8	
Haven Avenue		
Lemon Avenue To SR-210 Freeway	1.6	Retail
SR-210 Freeway To 19th Street	1.7	Residential
19th Street To Base Line Road	1.1	Residential, Retail
Base Line Road To Church Street	1.3	Residential
Church Street To Foothill Boulevard	1.6	Retail, Offices
Foothill Boulevard To Arrow Highway	2.5	Retail, Univ, Fire Depart.
Haven Avenue		
Arrow Highway To 8th Street	2.1	Commercial, Offices
Milliken Avenue		
Banyan Street To SR-210 Freeway	1.3	Residential
SR-210 Freeway To Victoria Park Lane	0.4	
Victoria Park Lane To Base Line Road	0.8	
Base Line Road To Terra Vista Parkway	0.9	
Terra Vista Parkway To Foothill Boulevard	1.4	Residential, Medical Center
Foothill Boulevard To Arrow Highway	0.9	
Arrow Highway To 6th Street	0.4	
6th Street To 4th Street	0.4	
4th Street To Inland Empire Boulevard	0.4	
Rochester Avenue		
Foothill Boulevard To Arrow Highway	2.6	Residential, Retail, Commercial, Ball Park
Arrow Highway To 6th Street	1.3	Commercial, Offices
Day Creek Boulevard		
Banyan Street To SR-210 Freeway	0.4	
SR-210 Freeway To Highland Avenue	0.4	

**TABLE 4.12-9 (Continued)
TRAFFIC NOISE CNEL INCREASES IN 2030**

Roadway Segment	Impact (dB)	Impacted Neighborhood
Etiwanda Avenue		
Victoria Street To Base Line Road	1.5	Residential, School, Historic Site
Base Line Road To Miller Avenue	0.7	
Miller Avenue To Foothill Boulevard	1.2	Residential
Foothill Boulevard To Arrow Highway	0.8	
Arrow Highway To City Boundary	0.7	
East Avenue		
Victoria Street To Base Line Road	2.1	Residential
Base Line Road To Miller Avenue	1.1	Residential
Americana Way		
North of Base Line Road	0.8	
South of Base Line Road	0.5	
Beach Avenue		
Cherry Avenue To I-15 Freeway	2.5	Residential
I-15 Freeway To SR-210 Freeway	2.7	Residential, Some Retail
I-15 Freeway		
Wilson Avenue To SR-210 Freeway	2.7	Commercial Site
SR-210 Freeway To Base Line Road	2.1	Residential, Hotel, Retail
Base Line Road To Foothill Boulevard	1.9	Residential, Retail
Foothill Boulevard To Arrow Highway	0.6	
Arrow Highway To San Bernardino Avenue	2.0	Industrial
SR-210 Freeway		
City Border To Carnelian Street	0.9	
Carnelian Street To Archibald Avenue	1.1	Residential, Retail, Park
Archibald Avenue To Haven Avenue	1.1	Residential, School, Retail
Haven Avenue To Milliken Avenue	1.2	Residential, Retail
Milliken Avenue To Day Creek Boulevard	1.3	Residential, Retail
Day Creek Boulevard To I-15 Freeway	1.6	Residential
† From Roadway Centerline N/A - Not Available Source: Mestre Greve Associates 2010c.		

The table shows that only one roadway segment would experience a noise increase that exceeds 3.0 dB over existing noise levels. That roadway segment is Arrow Highway from Rochester Avenue to Etiwanda Avenue. The land uses along this roadway segment are mainly industrial and some commercial offices, interspersed with vacant lots. There are no residential uses along this segment. The noise increase along this roadway segment is projected to be 3.8 dB, where the existing noise level is 71.0 dBA CNEL at 100 feet from the roadway centerline and the exterior noise standard for industrial uses is 75 to 85 dBA CNEL. Since there are no residential land uses or other noise sensitive receptors along this roadway segment, noise impacts are not predicted to be significant, even though the increase in noise levels would exceed 3.0 dB.

Any small noise increases (as measured on the decibel scale) in an area where the existing noise level exceeds the City's noise standards would be considered to have a significant noise

impact, while small noise increases in areas where the existing noise level does not exceed City standards would not be significant. Since it is not known what the actual CNEL noise level is at every sensitive receptor within the City, it is possible that some sensitive receptors may already be experiencing noise levels that are in excess of the limits specified by the noise ordinance standards. If that is the case, a small noise increase in those areas may cause a significant impact. For the purposes of identifying those areas that may potentially be impacted by small noise level increases, all roadway segments that are projected to experience a noise increase of 1 dB or more have been identified in Table 4.12-9 above.

There are a total of 54 roadway segments that will experience a noise increase of 1.0 dB or more. The neighborhoods surrounding 45 of the 54 roadway segments contain residential units or schools. Residential neighborhoods and schools are considered to be more sensitive than other land uses. Of the 45 roadway segments that have a sensitive receptor that is currently experiencing noise levels that are in excess of the standards, future development and redevelopment that would increase noise levels would cause a significant, adverse impact along that roadway segment. The land uses surrounding the remaining 9 roadway segments consist of office, industrial, retail, commercial, or parks. These land uses are less sensitive to small increases in noise than residential areas or schools, and, therefore, would be less likely to experience a significant adverse noise impact. As discussed previously, the existing CNEL at every sensitive receptor in the Study Area is not known; therefore, future development projects pursuant to the 2010 General Plan Update would be subject to individual environmental review. For purposes of this analysis, potential impacts are considered significant; however, implementation of MMs 4.12-5 through 4.12-7 requiring preparation of project-specific acoustical reports and adherence to the required mitigation measures identified in the reports would reduce impacts to less than significant levels.

Policy PS-14.1 calls for consultation with Caltrans and other regional agencies to minimize transportation-related noise.

Railroad Noise Impacts

Future development and redevelopment may also be located near the railroad tracks and would be exposed to noise levels exceeding City standards, according to the proposed land use. While industrial activities may not be sensitive to railroad noise, residential use and other noise-sensitive receptors (such as schools, libraries, churches, and hospitals) and certain commercial uses could be adversely affected by creating activity disturbances due to high noise levels.

Policy PS-14.2 requires mitigation of railroad noise impacts, as needed.

Development along railroads will need to prepare noise studies to determine noise exposure from train noise and incorporate measures to meet the City's standards for exterior and interior living areas. This may include site design with exterior living areas and common recreational areas on the opposite side of the tracks; noise control construction methods to reduce indoor noise levels; or provision of noise barriers.

Stationary Noise Impacts

Stationary sources from commercial and industrial developments and outdoor activities may also result in noise levels that exceed City standards and/or that adversely impact adjacent land uses. These include loading and unloading activities, outdoor maintenance activities, outdoor mechanical equipment, outdoor storage; and outdoor activities.

A number of policies in the Public Health and Safety Chapter address noise control. Policies PS-13.1 to PS-13.3 call for consideration of stationary and mobile noise sources during site planning. Policy PS-13.4 requires compliance with City standards near noise sensitive uses. Policy PS-13.5 calls for operating hour restrictions to control noise. Policy PS-13.7 requires mitigation of all exterior noise sources to acceptable levels. Policy PS-13.8 requires consideration of noise from adjacent uses. Policies PS-13.9 through PS-13.11 identify City enforcement, public education and inter-agency coordination to meet the City's noise goals.

Noise control measures to reduce stationary noise impacts would have to be implemented on a project-by-project basis, in accordance with the proposed land use and activities that would be conducted on individual development sites.

Impacts 4.12a through 4.12d: Construction activities associated with development pursuant to the 2010 General Plan Update would result in temporary increases in ambient noise levels during the various stages of construction and would have the potential to expose persons to noise levels in excess of standards established in the City's Noise Ordinance. However, compliance with SCs 4.12-1 through 4.12-3 and implementation of MMs 4.12-1 through 4.12-4 would reduce construction noise impacts to less than significant levels.

Vibration may be noticeable for short periods during construction, but it would be temporary and periodic and would not be excessive; vibration would not be a significant impact.

Future development and redevelopment under the proposed 2010 General Plan Update would lead to increases in noise levels that would affect residential uses and noise sensitive receptors. Implementation of MMs 4.12-5 through MM 4.12-7 would reduce impacts to less than significant.

Airport and Airstrip Noise

Threshold 4.12e **Would the proposed General Plan Update expose people residing or working in the project area to excessive noise levels, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?**

Threshold 4.12f **Would the proposed General Plan Update expose people residing or working in the project area to excessive noise levels, for a project within the vicinity of a private airstrip?**

As discussed previously, the closest major airport to Rancho Cucamonga is the LA/Ontario International Airport, which is located to the south of the City. At its closest distance, the LA/Ontario International Airport is only one mile from the Rancho Cucamonga's southern border. According to the latest noise contour (4th Quarter 2007 at Los Angeles World Airports), the City of Rancho Cucamonga is well outside the LA/Ontario International Airport's 65 dBA CNEL noise contour, which is generally along Airport Drive at the northern boundary of the airport. With a distance of approximately one mile from the City's southern boundary to the 65-dB CNEL, noise levels in Rancho Cucamonga are not expected to be exceeding the 55 to 60 dB CNEL exterior noise standard for residential uses. Aircraft noise does not significantly impact the City of Rancho Cucamonga.

Projected noise levels from airport operations show that in year 2030 the 65-dB CNEL noise contour would move to just south of the I-10 Freeway, with the 60-dB CNEL noise contour generally along Inland Empire Boulevard, or 0.5 mile from the City's southern boundary. Thus, future residential development and redevelopment at the southern end of the City may be exposed to airport noise levels in excess of the 55 dB standard from 10 PM to 7 AM. Therefore, buildout under the proposed 2010 General Plan Update would expose people residing or working in the project area to excessive noise levels. Development at the southern edge of the City will need to prepare acoustical reports to determine noise exposure from airport noise and incorporate measures to meet the City's standards for exterior and interior living areas. This may include site design with exterior living areas and common recreational areas on the northern side of the structure; noise control construction methods to reduce indoor noise levels; or provision of noise barriers. For purposes of this analysis, potential impacts are considered significant; however, implementation of MM 4.12-8 requiring preparation of project-specific acoustical reports and adherence to the required mitigation measures identified in the reports would reduce impacts to less than significant levels.

Impacts 4.12e Development associated with buildout of the 2010 General Plan Update and 4.12f: Study Area could expose people residing or working in the southern edge of the City to excessive noise levels from airport operations. Implementation of MM 4.12-8 would reduce noise exposure to airport and aircraft noise to less than significant levels.

4.12.7 CUMULATIVE IMPACTS

Future development and redevelopment in the City and the surrounding area would add new mobile and stationary noise sources, resulting in increased noise levels. The analysis of buildout of the proposed 2010 General Plan Update included cumulative traffic volumes. Thus, noise impacts associated with the proposed 2010 General Plan Update accounts for cumulative noise impacts. Noise levels in the City currently range from 59.6 to 80.6 dB CNEL at 100 feet from the roadway centerlines. Thus, existing residential uses and noise-sensitive receptors along the roadway segments with high noise levels are exposed to noise in excess of City standards. Projected 2030 noise levels would range 60.4 to 82.1 dB CNEL at 100 feet from the roadway centerlines. Table 4.12-9 shows the increase in noise from existing conditions to the year 2030. While increases of 3.0 dB or more would not affect noise sensitive land uses, there are areas of the City that experience noise levels above standards and there are residential uses and noise sensitive receptors along major roadways that are exposed to noise levels above standards. Any increase in noise levels at roadway segments where residential uses and noise-sensitive receptors are already exposed to levels exceeding City standards would be a significant and cumulative adverse impact. While future development and redevelopment can be designed to reduce their noise exposure to meet City standards, existing developments would continue to be exposed to increasing traffic noise levels exceeding City standards. No feasible mitigation is available for this noise impact. Thus, cumulative impacts will remain significant and unavoidable.

4.12.8 MITIGATION MEASURES

MM 4.12-1 Prior to the issuance of any grading plans, the City shall condition approval of subdivisions that are adjacent to any developed/occupied noise sensitive land uses by requiring applications to submit a construction-related noise mitigation plan to the City for review and approval. The Plan shall depict the location of the construction equipment and how the noise from this equipment would be mitigated during construction of the project.

- MM 4.12-2** Construction or grading noise levels shall not exceed the standards specified in Development Code Section 17.02.120-D, as measured at the property line. Developer shall hire a consultant to perform weekly noise level monitoring as specified in Development Code Section 17.02.120. Monitoring at other times may be required by the Building Official. Said consultant shall report their findings to the Building Official within 24 hours; however, if noise levels exceed the above standards, then the consultant shall immediately notify the Building Official. If noise levels exceed the above standards, then construction activities shall be reduced in intensity to a level of compliance with the City's noise standards or construction halted.
- MM 4.12-3** The construction-related noise mitigation plan required as part of the previous noise mitigation measure shall specify that haul truck deliveries be subject to the same hours specified for construction equipment (i.e., Monday through Saturday, 6:30 AM and 8:00 PM and not allowed on Sundays and national holidays). Additionally, the plan shall denote any construction traffic haul route where heavy trucks would exceed 100 daily trips (counting those both to and from the construction site). To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings. The construction-related noise mitigation plan shall also incorporate any other restrictions imposed by City staff.
- MM 4.12-4** If a perimeter block wall is required for a project, the wall shall be constructed as early as possible during the first phase of construction.
- MM 4.12-5** Applicants for new proposed land uses shall specify increased setbacks such that land uses do not lie within the 65 dBA CNEL overlay zone for commercial, office and sensitive uses (60 dBA CNEL for residential use). This would ensure that proposed land uses are not exposed to excessive noise from roadways, railroads and other nearby noise sources and that exterior and interior noise levels do not exceed the goals of the 2010 General Plan Update Public Health and Safety Chapter and the City's noise standards. If increased setbacks are not provided, an applicant may provide barriers between the noise source and the proposed development; site design that reduces the noise levels at exterior living areas; and/or sound insulation or specialized construction methods to block out exterior noise.

Prior to the Development Application CEQA review, a developer shall contract for a site-specific noise study for the specific project that identifies existing and projected noise levels and measures to maintain noise levels within City standards. The noise study shall be performed by an acoustic consultant experienced in such studies and the consultant's qualifications and methodology to be used in the study must be presented to City staff for consideration.

The final acoustical report shall be submitted for Planning Director review and approval prior to the issuance of building permits. The report shall discuss the level of interior noise attenuation to below 45 dBA CNEL, the building materials and construction techniques provided, and if appropriate, verify the adequacy of the mitigation measures. The building plans will be checked for conformance with the mitigation measures contained in the report.

The applicant shall submit certification from an acoustical engineer that all recommendations of the acoustical report were implemented in construction,

including measurements of interior and exterior noise levels to document compliance with City standards. Certification shall be submitted to the Building & Safety Department prior to final occupancy release of the affected homes.

Noise levels shall be monitored after construction to verify the adequacy of the mitigation measures, with noise levels monitored by actual noise level readings taken on- and off-site.

A final acoustical report shall be submitted for Planning Director review and approval prior to final occupancy release. The final report shall make a determination that the mitigation measures have reduced noise levels to below City standards, such as, residential exterior noise levels to below 60 dBA and interior noise attenuation to below 45 dBA.

MM 4.12-6 No industrial facilities shall be constructed within 500 feet of any commercial land uses or within 2,800 feet of any residential land uses without preparation of a noise analysis. This analysis shall document the nature of the industrial facility, as well as noise producing operation associated with the facility. Noise control measures shall be incorporated into the development of the facility to ensure compliance with the City's noise standards.

MM 4.12-7 Restrictions on commercial, industrial and other non-residential activities shall be imposed by the City, so as not to create any noise that would exceed exterior and interior noise standards. This may include restrictions on business operations to maintain noise levels at 60 dB or less during the hours of 10 PM until 7 AM and at 65 dB or less during the hours of 7 AM until 10 PM; establishment of set hours of operation; and regulations on loading and unloading activities such that no person shall cause the loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or other similar objects between the hours of 10 PM and 7 AM unless otherwise specified herein, in a manner which would cause a noise disturbance to a residential area.

MM 4.12-8 Residential developments and redevelopments at the southern edge of the City shall prepare an acoustical study to determine site exposure to airport noise and identify noise control measures that would be incorporated into the project to achieve compliance with the City's interior and exterior noise standards for residential uses. These noise control measures may include locating outdoor living areas at the northern section of the site or north of the proposed structure; enclosed common recreational areas; provision of a wall, berm or other barrier to the noise source; and sound insulation or specialized construction methods to block out exterior noise.

The acoustical report shall be submitted for Planning Director review and approval prior to the issuance of building permits. The report shall discuss the level of interior noise attenuation to below 45 CNEL, the building materials and construction techniques provided, and if appropriate, verify the adequacy of the mitigation measures. The building plans will be checked for conformance with the mitigation measures contained in the report.

The applicant shall submit certification from an acoustical engineer that all recommendations of the acoustical report were implemented in construction, including measurements of interior and exterior noise levels to document

compliance with City standards. Certification shall be submitted to the Building & Safety Department prior to final occupancy release of the affected homes.

Noise levels shall be monitored after construction to verify the adequacy of the mitigation measures, with noise levels monitored by actual noise level readings taken on- and off-site.

A final acoustical report shall be submitted for Planning Director review and approval prior to final occupancy release. The final report shall make a determination that the mitigation measures have reduced noise levels to below City standards, such as, residential exterior noise levels to below 60 dBA and interior noise attenuation to below 45 dBA.

4.12.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Noise Levels and Vibration

Less Than Significant With Mitigation.

Airport and Airstrip Noise

Less Than Significant With Mitigation.

Cumulative Impacts

Significant and Unavoidable.

4.13 POPULATION, HOUSING, AND EMPLOYMENT

This section addresses the existing population, housing, and employment conditions in the City of Rancho Cucamonga, County of San Bernardino, and the region; it also analyzes estimated population growth and trends related to future housing and employment anticipated in the City, County, and region, as contained in the proposed 2010 General Plan Update's Housing Element. The assessment of population, housing, and employment impacts is based on estimates of City buildout, as developed in the preparation of the proposed Land Use Plan.

4.13.1 RELEVANT POLICIES AND REGULATIONS

State

State Housing Law

State Housing law recognizes the need to provide decent housing for all residents and for uniform building standards to protect the health, safety, and general welfare of the public and occupants of housing and accessory buildings, as stated in Division 13, Part 1.5 of the *California Health and Safety Code*. The California Department of Housing and Community Development (HCD) is responsible for implementing this law and has developed legislation and regulations that include building standards for new construction of hotels, motels, lodging houses, apartments, dwellings, and accessory buildings. These standards are part of Title 24 of the *California Code of Regulations* (California Building Code), and include requirements for specific accommodations for persons with physical disabilities. In addition, regulations on the maintenance, use, occupancy, repair, alteration, moving, and demolition of residential uses have been added by HCD into the *California Code of Regulations* (Title 25, Division 1, Chapter 1). The HCD oversees the application of State laws, regulations, and code enforcement by a city or county, or a city's or county's building, housing, health, or fire department or fire district.

Housing Element Law

As part of Statewide housing policy, the Legislature mandates that all cities and counties include a Housing Element as part of their adopted General Plan. Section 65583 of the *California Government Code* requires the preparation of a Housing Element and specifies that its contents include a needs assessment; a statement of goals, objectives, and policies; a five-year schedule of program actions; and an assessment of past programs. This law also requires the regular update of the Housing Element to address the changes in existing and future housing needs of each jurisdiction, as determined by the Regional Housing Needs Assessment (RHNA). Section 65588 of the *California Government Code* previously established the deadline for the fourth revision of the Housing Element to be June 30, 2006. However, the California Department of Housing and Community Development extended the deadline for the revision to July 1, 2008. The fifth revision adoption deadline has been set as June 30, 2014.

Regional

Regional Housing Needs Assessment

State law requires all regional councils of government (COGs), also known as municipal planning organizations (MPOs), which includes SCAG, to determine the existing and future housing needs for its region (*California Government Code*, Section 65580 et. seq.). SCAG is also required to determine the allocation of housing that must be accommodated within each city and county in the SCAG region.

SCAG’s Regional Housing Needs Assessment (RHNA) provides an allocation of the existing and future housing needs by jurisdiction; this is based on income level, existing housing needs within each city and county, and the fair share allocation of the projected regional population growth. The allocations are driven by the intent that a better balance between jobs and housing should occur in various areas of the region and that every city should incur its fair share in the development of affordable housing units and in meeting future housing needs.

SCAG defines “existing needs” as the number of low-income households overpaying for housing (defined as paying more than 30 percent of their income), as well as those in severe overcrowded conditions, farm worker needs for housing, and affordable housing units at risk of conversion to market rate housing.

SCAG defines “future needs” as the number of additional housing units by income level that will have to be created in the City as a fair share of the region’s projected housing needs based on the estimated population growth in the city and region. SCAG calculates future housing needs based upon each individual city’s household growth forecasts, plus a certain amount of units needed to account for ideal level of vacancy needed to promote housing choice, to account for moderate cost increase, to avoid the concentration of lower income households, and to provide for replacement housing.

Housing needs are broken down by income group, based on household size and the County of San Bernardino’s Area Median Income (AMI). The income groups are:

- Extremely Low Income – 0 to 30 percent of the AMI;
- Very Low Income – 31 to 50 percent of the AMI;
- Low Income – 51 to 80 percent of the AMI;
- Moderate Income – 81 to 120 percent of the AMI; and
- Above Moderate Income – above 120 percent of the AMI.

For 2009, the HCD set the AMI for a 4-person household in San Bernardino County at \$64,500. Income limits by household size for the San Bernardino County area are provided in Table 4.13-1.

**TABLE 4.13-1
STATE INCOME LIMITS (2009) FOR SAN BERNARDINO COUNTY**

Income Category	Number of Persons in Household							
	1	2	3	4	5	6	7	8
Extremely Low	\$14,000	\$16,000	\$18,000	\$20,000	\$21,600	\$23,200	\$24,800	\$26,400
Very Low	\$23,300	\$26,650	\$29,950	\$33,300	\$35,950	\$38,650	\$41,300	\$43,950
Low	\$37,300	\$42,650	\$47,950	\$53,300	\$57,550	\$61,850	\$66,100	\$70,350
Moderate	\$54,200	\$61,900	\$69,650	\$77,400	\$83,600	\$89,800	\$96,000	\$102,150
Median Income	\$45,150	\$51,600	\$58,050	\$64,500	\$69,650	\$74,800	\$80,000	\$85,150

Source: HCD 2009.

The RHNA is updated every 5 to 6 years and identifies the housing needs for the upcoming multi-year period. In fall 2007, The California HCD and U.S. Department of Housing and Urban Development (HUD), in cooperation with SCAG, approved the Southern California region’s Final RHNA allocation for the January 1, 2006 to June 30, 2014 planning period. The City of Rancho Cucamonga’s final housing allocation is provided in Table 4.13-2.

**TABLE 4.13-2
RANCHO CUCAMONGA'S HOUSING ALLOCATION (2006–2014)**

Income Group	Extremely Low ^a	Very Low	Low	Moderate	Above Moderate	Total
Future Housing Need (units)	317		216	245	504	1,282
Percent^b	24.7%		16.8%	19.1%	39.3%	100.0%
Existing Housing Need (units)	1,690	1,970	3,385	1,615	7,215	15,875
Percent^b	10.6%	12.4%	21.3%	10.2%	45.4%	100.0%
^a State law now requires that the City also project the housing needs of extremely low income households. It can be assumed that 50 percent of the very low-income households have extremely low incomes. Therefore, from the very low income need of 317 units, the City has a projected need of 159 units for extremely low income households. ^b Percentage amounts may not add to 100 due to rounding.						
Source: SCAG 2007a.						

As shown, the City of Rancho Cucamonga is identified as having a future housing construction need of 1,282 dwelling units and an existing housing need of 15,875 housing units/households. The majority of the existing housing need consists of over-paying households in the City.

Local

Rancho Cucamonga Housing Element

As mandated by State law, the Rancho Cucamonga Housing Element was updated in 2000 and is part of Chapter III of the City's 2001 General Plan. The Housing Element addresses the housing needs of the City for the June 2000 to June 2005 planning period. It includes an overview of (1) the population and housing characteristics; (2) constraints to housing development; and (3) the City's housing goals, objectives, policies, and programs.

The Housing Element addresses the City's future housing need of 2,344 units for the 2000–2005 planning period, and identifies various assistance programs to serve the housing needs of the existing resident population. For each housing program, the Element includes quantified objectives, the responsible department/agency, funding sources, and schedules.

With new RHNA numbers for the 2006–2014 planning period from SCAG, the Housing Element is required to be updated to address the City's regional share of existing and future housing needs. The Housing Element is currently being updated; however, it is not addressed as part of this EIR and will require separate CEQA review.

4.13.2 EXISTING CONDITIONS

Population

The City of Rancho Cucamonga incorporated in 1977 with a population of approximately 44,600 persons (DOF 1984). According to the California Department of Finance (DOF), the City had a resident population of 53,800 persons in 1980 (DOF 1984); as shown in Table 4.13-3, by 1990, the resident population grew to 101,409 persons. The 2000 Census estimated the City's population at 127,743 persons, and current estimates place the City's January 2009 population at 177,736 persons. Table 4.13-3 shows historic population growth in the City and in San Bernardino County.

**TABLE 4.13-3
POPULATION GROWTH**

Year	City	Annual Growth	County	Annual Growth
1990	101,409		1,418,380	
2000	127,743	2.59%	1,710,139	2.06%
2001	133,092	4.19%	1,746,874	2.15%
2002	139,904	5.12%	1,793,009	2.64%
2003	149,175	6.63%	1,840,628	2.66%
2004	157,346	5.48%	1,893,861	2.89%
2005	163,880	4.15%	1,946,312	2.77%
2006	172,360	5.17%	1,990,390	2.26%
2007	173,999	0.95%	2,022,710	1.62%
2008	175,706	0.98%	2,044,895	1.10%
2009	177,736	1.16%	2,060,950	0.79%

Source: DOF 2009.

As shown in Table 4.13-3, significant growth in the City occurred between 2000 and 2006 at a rate of 5.8 percent, and population increases in the City were higher than Countywide population increases from this period. This growth has slowed down in recent years, with the City's population growing at an approximate rate of one percent annually (DOF 2009).

Housing

Table 4.13-4 shows historic housing growth in the City and the County. According to the California DOF, the City's housing stock consisted of 42,134 housing units in 2000. In January 2009, the housing stock increased to 55,716 housing units. Since 2000, the City and the County have both experienced positive growth of their housing stock; however, the annual growth rates experienced between 2000 to 2006 were higher in the City than in the County and, in 2007 and 2008, the housing stock in the County increased at a more rapid pace.

**TABLE 4.13-4
HOUSING STOCK GROWTH**

Year	City	Annual Growth	County	Annual Growth
2000	42,134	–	601,369	–
2001	42,953	1.94%	605,809	0.74%
2002	44,425	3.43%	612,906	1.17%
2003	46,870	5.50%	621,731	1.44%
2004	48,964	4.47%	632,034	1.66%
2005	50,749	3.65%	645,394	2.11%
2006	53,606	5.63%	661,435	2.49%
2007	54,412	1.50%	676,676	2.30%
2008	55,103	1.27%	685,409	1.29%
2009	55,716 ^a	1.11%	690,234	0.70%

a For purposes of consistency, the DOF estimate for 2009 housing stock was used instead of the baseline figure cited previously in Table 3-1. The difference between the two figures is not statistically significant.

Source: DOF 2009.

As shown in Table 4.13-5, currently the majority of the City's housing stock (64 percent) consists of single-family detached units. Approximately 24 percent of dwelling units exist as large, multi-family developments with 5 units or more. The remainder of the City's housing stock exists as 6 percent multi-family units (2–4 units) and 2 percent mobile homes.

**TABLE 4.13-5
HOUSING TYPE**

Housing Type	2000		2003		2006		2009	
	Number of Units	Percent of Total	Number of Units	Percent of Total	Number of Units	Percent of Total	Number of Units	Percent of Total
Single-Family Detached	29,220	69%	32,156	69%	34,711	65%	35,674	64%
Single-Family Attached	2,532	6%	2,569	5%	3,027	6%	3,373	6%
Multi-Family 2-4 Units	1,794	4%	1,794	4%	1,942	4%	1,954	4%
Multi-Family 5+ Units	7,216	17%	8,979	19%	12,554	23%	13,335	24%
Mobile Homes, Trailer & Other	1,372	3%	1,372	3%	1,372	3%	1,380	2%
Total	42,134	100%	46,870	100%	53,606	100%	55,716	100%

Note: Percentage totals may not add to 100 due to rounding.
Source: DOF 2009.

Of the City's total of 55,716 units in 2009, approximately 54,036 units are occupied, for a vacancy rate of 3.02 percent (DOF 2009).

In 2009, that City had an average of 3.22 persons per household, which is slightly lower than the County's average household size of 3.29 persons per household (DOF 2009).

Employment

As shown in Table 4.13-6, the City's labor force (persons 16 years and older) consisted of 61,950 persons in 2000. In 2007, Rancho Cucamonga had over 63,000 jobs, or approximately 5 percent of the Inland Empire's¹ economy (Rancho Cucamonga 2007). This number increased to 78,673 persons in 2006 and was estimated at 82,899 persons in 2008. According to the U.S. Census Bureau, since 2000, the City's labor force has been mainly employed in managerial/professional occupations, as well as in sales and office occupations. Table 4.13-6 shows the breakdown of occupation by residents of the City.

¹ The Inland Empire includes San Bernardino and Riverside Counties.

**TABLE 4.13-6
EMPLOYMENT BY OCCUPATION**

Occupation	2000 ^a		2006–2008 Estimates ^{ab}	
	Employees	Percent	Employees	Percent
Managerial/Professional	22,080	35.6%	31,257	37.7%
Service occupations	8,164	13.2%	11,230	13.5%
Sales and office occupations	18,918	30.5%	26,095	31.4%
Farming, fishing, forestry	117	0.2%	82	0.1%
Construction, Maintenance, Repair	5,248	8.5%	6,444	7.7%
Production/Transportation	7,423	12.0%	7,791	9.4%
Total	61,950	100.00%	82,899	100.0%
<p>* The American Community Survey (ACS) is conducted under the authority of the <i>United States Code</i> (Title 13, Sections 141 and 193) and is part of the reengineered Decennial Census Program. Data that were previously collected only in census years is now collected every year as part of the ACS to provide more current data throughout the decade. Beginning with the 2005 ACS, and continuing every year thereafter, 1-year estimates are available for geographic areas with a population of 20,000 persons or more. In 2008, the ACS released its first multi-year estimates based on data collected from 2005 through 2007. By 2010, estimates for areas with populations of 20,000 persons or less would be available, based on data collected from 2005 through 2009. The 2006–2008 Estimates is a data set that presents the estimates for the 3-year survey, along with the associated 90% margin of error.</p> <p>Note: Percentages may not add to 100 due to rounding.</p> <p>Sources: ^a U.S. Census Bureau 2000; American Community Survey 2006-2008**</p>				

According to the California Employment Development Department (EDD), Rancho Cucamonga’s labor force consisted of 77,100 persons as of September 2009; of this, 70,200 persons were employed and 6,900 persons were unemployed. This translates to a Citywide unemployment rate of 8.9 percent, which is lower than the Countywide estimate of 13.6 percent (EDD 2009).

According to the *Economic Conditions Background Report* prepared in April 2009 by Strategic Economics, employment in the City is dominated by the educational, health, and social services sector (21 percent). Additionally, approximately 13 percent of the City’s employment is within the retail sector; 13 percent is within the manufacturing sector; 8 percent is within the finance, insurance, and real estate sector; and 6 percent is within the construction sector (Strategic Economics 2009). The largest employers in the City are Chaffey Community College, Etiwanda School District, City of Rancho Cucamonga, Southern California Edison Company, Alta Loma School District, Mercury Insurance Company, West Coast Liquidators, and Recot/Frito-Lay, Inc. (Strategic Economics 2009).

Growth Projections

Growth projections for the City of Rancho Cucamonga have been developed by SCAG as part of its regional planning efforts for the development of the Regional Comprehensive Plan, the Regional Transportation Plan, and the RHNA.

As shown in Table 4.13-7, the City of Rancho Cucamonga is projected to have a 2035 population of 172,421² persons, with 55,182 housing units and an employment base of 97,873 persons.

² When compared, the actual population figure for the City in 2009 (shown in Table 4.13-3) is greater than the projected population figure for the City in 2035 (shown in Table 4.13-7). This discrepancy is due to different information sources and different methods of data collection. For purposes of analysis, this PEIR relies upon SCAG projections presented in Table 4.13-7 due to the lack of available projections from the DOF.

**TABLE 4.13-7
GROWTH PROJECTIONS FOR RANCHO CUCAMONGA**

	Year							
	2003	2005	2010	2015	2020	2025	2030	2035
Population	151,087	166,348	171,980	172,404	172,409	172,413	172,417	172,421
Households	46,471	50,603	52,027	53,396	53,878	54,341	54,774	55,182
Employment	54,184	59,984	67,382	73,494	78,524	84,414	90,913	97,873

Source: SCAG 2008a.

Jobs/Housing Balance

SCAG states that “a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternatively, a jobs/housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply” (SCAG 2001). Jobs and housing are considered in balance when a subregion has enough employment opportunities for most people who live there and enough housing opportunities for most of the people who work there. The jobs/housing balance is one indicator of quality of life in the project area. SCAG uses the jobs/housing ratio to assess the relationship between housing and employment growth.

Jobs-rich areas in Southern California are located in the highly urbanized areas in the western portion of the region, primarily in southern and western Los Angeles County, and in central and northern Orange County. Housing-rich areas are located in suburban communities located east of these employment centers, including San Bernardino and Riverside Counties and North Los Angeles County. Table 4.13-8 identifies the projected jobs/housing ratio for both the County and the City between 2010 and 2035.

**TABLE 4.13-8
JOBS-HOUSING RATIO (2010–2035)**

	2010	2015	2020	2025	2030	2035
San Bernardino County						
Population	2,182,049	2,385,748	2,582,765	2,773,945	2,957,753	3,133,801
Household (du)	637,250	718,602	787,142	852,986	914,577	972,561
Employment	810,233	897,489	965,778	1,045,480	1,134,960	1,254,749
Jobs/Housing Ratio	1.27	1.25	1.23	1.23	1.24	1.29
Rancho Cucamonga						
Population	171,980	172,405	172,409	172,414	172,417	172,420
Household (du)	52,027	53,396	53,877	54,339	54,776	55,181
Employment	67,382	73,494	78,523	84,413	90,912	97,874
Jobs/Housing Ratio	1.30	1.38	1.46	1.55	1.66	1.77
du: dwelling units						

Source: SCAG 2008.

As shown in Table 4.13-8, the City’s jobs/housing ratio is projected to increase from 1.30 jobs per household in 2010 to 1.77 jobs per household in 2035, suggesting an increase in non-residential development in the City, with a slower increase in housing development. On the

other hand, the County of San Bernardino would only increase jobs by 0.02 percent with a jobs/housing ratio of 1.29 jobs per household in 2035.

Jobs/housing balance defines an area where the number of housing units available for the employed population is equivalent to the number of jobs in an area. Alternatively, the provision of employment to fill the housing supply may also be considered jobs/housing balance. The job/housing ratio for the SCAG region was 1.25 in 1997 and 1.34 in 2000. An area with a ratio higher or lower than 1.0 to 1.29 is considered out of balance. SCAG considered the City of Rancho Cucamonga and surrounding areas in southwestern San Bernardino County to be "Balanced" in 1997 but projects this same area to be "Very Job Rich" by 2025 (SCAG 2001). SCAG projections show that the City will have a jobs/housing ratio of 1.33 to 1.77 between 2010 and 2035, making it jobs-rich (SCAG 2008).

4.13.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact related to population, employment and housing if it would:

Threshold 4.13a: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);

Threshold 4.13b: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or

Threshold 4.13c: Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.13.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed General Plan address the resident population, the provision of adequate housing, and the promotion of employment opportunities to area residents. Specifically, the current 2000 Housing Element addresses the existing and future housing needs of the City. Implementation of the goals and policies in this Element would reduce adverse impacts on population, housing, and employment from future development and redevelopment. While the ongoing update of the Housing Element would lead to changes to these goals, policies and programs, the goal and objectives of the City in meeting the housing needs of its existing and future residents is expected to remain the same.

GOAL: *The City shall provide opportunities and incentives for the provision of a variety of housing types for economic segments wishing to reside in the community regardless of race, religion, sex, or income group.*

Objective 1: *Allow and create new opportunities that enable a broad range of housing types, maintain a balanced supply of ownership and rental units, and provide sufficient numbers of dwelling units to accommodate expected new household formations.*

Objective 2: *Provide housing opportunities that meet the needs of all economic segments of the community including very low, low-, and moderate-income households and special needs groups.*

- Objective 3: Promote equal housing opportunities for all economic segments of the community regardless of race, sex, or religion.*
- Objective 4: Provide quality residential environments which contribute to a well-functioning community by ensuring residential development which is not only attractive in design, but which functions to protect the public safety and welfare, and provide benefits to the community.*
- Objective 5: Conserve and improve the existing housing stock, including structures of historic significance, and eliminate the causes and spread of blight by encouraging the investment of public and private funds in housing rehabilitation and public improvements.*
- Objective 6: Provide opportunities so that 30% of the persons employed in the City may live in the City.*
- Objective 7: Require energy efficiency in all residential developments.*
- Objective 8: Where possible, eliminate governmental constraints.*
- Objective 9: As required by State law, periodically update the housing element, including evaluation of its effectiveness in attainment of its goal, objectives, policies, and programs.*

Goals and policies in the proposed 2010 General Plan Update that address the resident population and housing issues, along with their corresponding implementation actions, include:

GOAL LU-1: Ensure established residential neighborhoods are preserved and protected, and local and community-serving commercial and community facilities meet the needs of residents.

Policy LU-1.1: Protect neighborhoods from the encroachment of incompatible activities or land uses that may have a negative impact on the residential living environment.

Implementation Action: *Review and amend the residential zoning classifications of the Development Code to ensure that the allowable land uses are compatible with densities of residential neighborhoods.*

Policy LU-1.6: Encourage small-lot single-unit attached and/or detached residential development (5,200 square-foot-lots or smaller) to locate in areas where this density would be compatible with adjacent residential neighborhoods.

Implementation Action: *Review and modify the Development Code and corresponding zoning maps to ensure that the small-lot single-family housing type can be accommodated within those residential districts with an underlying Medium Residential land use designation.*

Policy LU-3.5: Work toward a sustainable jobs-housing balance by accommodating a range and balance of land uses within Rancho Cucamonga.

Implementation Action: *Continue with business retention and attraction programs, and promote residential development opportunities to the development community within areas designated Mixed Use.*

Policy LU-3.10: Reserve appropriate areas of land for institutional uses to ensure that necessary services are provided to all areas of the community, and to encourage the creation of job opportunities for Rancho Cucamonga residents.

Implementation Action: *Review and modify portions of the Development Code to discourage the intrusion of institutional uses within industrial/commercial districts, while identifying areas within other zoning districts that are appropriate for inclusion of institutional uses that serve residents.*

GOAL LU-6: Promote the stability of southwest Rancho Cucamonga residential neighborhoods.

Policy LU-6.1: Continue to encourage commercial and community services that meet community needs.

Implementation Action: *Identify and implement economic development incentives that can increase the availability of commercial businesses to serve neighborhoods within the Southwest focus area, particularly on infill properties.*

4.13.5 STANDARD CONDITIONS OF APPROVAL

There are no existing Federal, State and regional regulations that relate to population, housing and employment and that are applicable to the proposed 2010 General Plan Update.

4.13.6 ENVIRONMENTAL IMPACTS

Future residential development and redevelopment in the City pursuant to the proposed 2010 General Plan Update are expected to lead to increases in the resident population and housing stock of the City. Non-residential development and redevelopment would create job opportunities for residents of the City and the surrounding area.

Population Growth

Threshold 4.13a: Would the proposed General Plan Update induce substantial population growth in an area, either directly (for example, by proposed new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Population

As described in Section 3.0, Project Description, future development and redevelopment in the City and SOI pursuant to the proposed 2010 General Plan Update is estimated to produce up to 7,584³ new dwelling units. Full occupancy of these dwelling units would increase the City's resident population by approximately 24,300 residents, based on the City's average household size of 3.2 persons per household (Rancho Cucamonga 2009b). This would increase the City's current (2009) estimated resident population of 177,736 residents by 14.66 percent to 203,800 residents at full General Plan buildout, which is expected in 2030.

While buildout of the City would lead to an increase in the local population that would exceed established SCAG projections, the increase in population itself is not considered a significant impact. Rather, demand for goods and services that may be created by the new residents could

³ This figure is based on the baseline figures cited previously in Table 3-1.

indirectly lead to impacts. Commercial goods and services would be provided by existing commercial uses in the City and in the surrounding areas. Demand for public services and the impacts of future development and redevelopment on these services are discussed in Section 4.14, Public Services, and Section 4.15, Recreation. Demand for utility services is discussed in Section 4.17, Utilities. Direct impacts related to the increase in residents in the City itself are expected to be less than significant; no mitigation is required.

Housing

The proposed Land Use Plan (refer to Section 3.0, Project Description) shows a total buildout of 62,196 housing units citywide, with another 1,057 units in the SOI for a total of 63,253 units in the planning area at General Plan buildout. Approximately 7,584 new dwelling units are expected in the City (including the SOI) which is an increase of 13.62 percent over the existing housing stock of 55,716 units⁴ in January 2009. This buildout would exceed current SCAG projections of households for 2030. Thus, there would be adequate housing units to accommodate the projected households in the City.

New housing development is anticipated on vacant lots with residential designations, the majority of which are in the eastern section of the City, in the hillside areas in the SOI, and in vacant areas designated for Mixed Use development, as shown in the proposed Land Use Plan (refer to Exhibit 3-3 in Section 3.0, Project Description).

Assuming development of a mix of market-rate and affordable housing, the development of new housing units associated with General Plan buildout in the City would exceed the City's future housing need for 1,282 units, as allocated by the RHNA for the 2006–2014 planning period and to be addressed by the updated Housing Element.

As outlined above, the current Housing Element goal and objectives address the provision of adequate housing for all residents in the City, as well as meeting the identified existing and future housing needs of the City of Rancho Cucamonga. The goal and objectives articulate the City's commitment to the provision of housing for all residents.

Implementation of the City's housing programs would ensure the housing needs of the City's resident population are met with the appropriate types of housing that would be developed in the City. Impacts associated with increases in housing stock would be less than significant; no mitigation is required.

Employment

The Land Use Plan in the proposed General Plan will allow the development of a total of 99,797,700 square feet of non-residential development, and 103,040 total jobs. This represents an increase of 25,690 jobs over the City 2009 employment base of approximately 77,350 jobs (Hogle 2009) and exceeds current SCAG projections for employment positions for 2030 by 12,128 jobs. The increase in the City's employment base is expected to have a beneficial impact on local residents who want to be employed near their places of residence. These jobs would also meet the demand for services that would be required by the increasing resident population. This would result in a less than significant impact; no mitigation is required.

⁴ This figure represents the DOF estimate for 2009 housing stock and is slightly higher than the 2009 housing stock identified in the 2010 General Plan Update and Table 3-1 of this PEIR. The difference between the two figures is not statistically significant.

Infrastructure

While the proposed 2010 General Plan Update includes a Circulation Plan in the Community Mobility Element, it does not call for the construction or extension of roadways into undeveloped areas. Similarly, the Public Facilities and Infrastructure Element does not propose new facilities or infrastructure in undeveloped areas that would induce growth. While the availability of roadways and utility infrastructure in the City could induce the development of adjacent vacant lands, developers of new projects would still be responsible for improving roads and upgrading the infrastructure, as needed, to serve it. Future development and redevelopment would also need to connect to the water, sewer, storm drain, power, gas, telephone, and cable lines; project applicants would pay connection and service fees to the City or other utility agencies. Developments in the undeveloped areas of the SOI would have to provide the roadway and utility extensions needed to serve the development in this area when it occurs.

In areas where existing roadways and utility infrastructure lines are in place, no population growth is expected from the proposed General Plan. Also, no roadway or infrastructure extensions are proposed by the General Plan that would induce development in the undeveloped areas of the SOI. Less than significant impacts would occur; and no mitigation is required.

Growth Projections

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would lead to population, housing, and employment growth in the City. Buildout of the City is estimated to include 63,261 housing units, with 203,800 residents and 103,040 jobs by 2030. These buildout capacities exceed SCAG's 2030 and 2035 projections for the City: 172,417 persons, 54,776 households, and 90,912 jobs by 2030 and 172,420 residents, 55,181 households, and 97,874 jobs by 2035 (SCAG 2008a). However, it should be noted that the City's 2009 population (177,736 residents) and housing stock (55,716 units) already exceed SCAG's 2035 population and household projections: 172,420 residents, 55,181 households, and 97,874 jobs (SCAG 2008a).

Since SCAG's projections are for a specific year, while the City's buildout capacity will be reached depending on the local rate of growth and development, this suggests that the proposed 2010 General Plan Update would accommodate growth in the City beyond the anticipated buildout date of 2030. The exceedances do not necessarily mean that substantial growth will occur in the City at one time or that a significant adverse impact will occur. No specific development proposal is being considered, nor is immediate development expected with adoption of the proposed 2010 General Plan Update. Actual development applications will continue to be largely influenced by property owner discretion and based on market demand. The proposed 2010 General Plan Update is intended to serve as a guide for future development over the next 10 to 20 years. Therefore, impacts related to growth projections could be less than significant, but have the potential for a significant impact based on future development proposals and entitlements.

Jobs-Housing Balance

Jobs/housing balance is an indicator of balanced growth and quality of life in the project area. The County's jobs/housing ratio is 1.27 in 2010 and is projected to be 1.29 in 2035, while the City's jobs/housing ratio is estimated at 1.30 in 2010 and is projected to be 1.77 in 2035 (SCAG 2008a), indicating a future jobs-rich condition.

Buildout of the City under the proposed Land Use Plan, as discussed in Section 3.0, Project Description, would lead to a housing stock of 63,253 units, with 203,800 residents, and an employment base of 103,040 jobs. This translates to a jobs-housing ratio of 1.63 jobs per household. The proposed General Plan shows a slightly lower jobs-housing ratio at buildout than SCAG projections, but still improves over the City's 2010 jobs/housing ratio and anticipates the City to be jobs-rich in the future. This could be a significant impact, drawing vehicles from other areas to the City and creating more traffic congestion, but if the trips are drawn from nearby communities and eliminate long trips to distant job markets, the impact would be a positive change.

Impact 4.13a: The proposed 2010 General Plan Update will indirectly increase the City's population, housing stock, and employment base by providing capacity to accommodate future development. Exceedances of SCAG projections for population, households, and employment are expected, which may have the potential for a significant impact based on the rate of future development proposals and entitlements. Also, the increase in the jobs/housing ratio at buildout may create more traffic congestion. However, if these trips replace longer trips to distant job markets, regional impacts would be beneficial. Additionally, traffic impacts associated with buildout of the proposed 2010 General Plan Update are expected to be fully reduced to less than significant impact through implementation of programmed improvements as detailed in Section 4.16, Transportation/Traffic. Therefore, impacts would be less than significant; no mitigation is required.

Displacement of Housing and People

Threshold 4.13b: Would the proposed General Plan Update displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Threshold 4.13c: Would the proposed General Plan Update displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed Land Use Plan shows that the City's development capacity will increase by 7,584 dwelling units over the existing housing stock. This will lead to a buildout of 62,196 housing units citywide, with another 1,057 units in the SOI for a total of 63,253 units in the Study Area. The proposed Land Use Plan, depicted on Exhibit 3-3, preserves the City's existing residential neighborhoods (Goal LU-1 and supporting policies in the Land Use, Community Design and Historic Resources Chapter). Thus, existing residential developments in the City are expected to remain in place, and displacement would not occur in these areas. Future development on vacant lots also would not involve any displacement. The only anticipated impacts related to displacement of housing or people would occur as older structures are redeveloped or improved by the property owners. However, this redevelopment would only result in the temporary displacement of households and residents, which would result in a less than significant impact; no mitigation is required.

Impacts 4.13b and 4.13c: Displacement of housing and people may occur on a temporary basis as property owners elect to do on-site redevelopment or improvement projects. Due to the short-term nature of displacement, potential impacts would be less than significant; no mitigation is required.

4.13.7 CUMULATIVE IMPACTS

Increases in the population, housing, and employment base of San Bernardino County are expected over time due to in-migration and birth. Future development pursuant to the proposed Rancho Cucamonga General Plan and in the County would lead to the development of new homes, the creation of new jobs, and the increase in the resident population of the City and the rest of the County. SCAG estimates as many as 3,133,801 persons, 972,561 housing units and 1,254,749 jobs throughout San Bernardino County by 2035. This would include the City's buildout capacity with 63,261 housing units with 203,800 residents and an employment base of 103,040 jobs based on the buildout summary of the 2010 General Plan Update, shown in Table 3-1. Table 4.13-9, Regional Growth Projections, shows projected growth in the County and the SCAG region.

**TABLE 4.13-9
REGIONAL GROWTH PROJECTIONS**

	Year					
	2010	2015	2020	2025	2030	2035
San Bernardino County						
Population	2,182,049	2,385,748	2,582,765	2,773,945	2,957,753	3,133,801
Households	637,250	718,602	787,142	852,986	914,577	972,561
Employment	810,233	897,489	965,778	1,045,480	1,134,960	1,254,749
SCAG Region						
Population	19,418,344	20,465,830	21,468,948	22,395,121	23,255,377	24,057,286
Households	6,086,986	6,474,074	6,840,328	7,156,645	7,449,484	7,710,722
Employment	8,349,453	8,811,406	9,183,029	9,546,773	9,913,376	10,287,125
Source: SCAG 2008a.						

The increase in population itself is not expected to be a significant cumulative adverse impact, as long as housing can adequately accommodate the population increases and goods and services are available to meet the needs of the population. The cumulative increase in population in the County would be accompanied by an increase in housing stock, as projected by SCAG. Thus, housing would be available for the future population. Whether this housing is adequate will depend on the rate of housing development and the success of housing programs in the County.

The RHNA identifies the existing and future housing needs for each city and county in the region, and State law requires each city and county to provide sites to accommodate future needs and to offer programs to meet existing housing needs. For the 2006–2014 planning period, the City of Rancho Cucamonga is expected to provide 1,282 units to meet its future needs, with the entire County expected to provide capacity for 107,543 units (SCAG 2007a). Subsequent updates of the RHNA and the cities' and county's individual Housing Elements would provide a continuous effort to meet future housing needs in the City, County, region, and State. Implementation of the programs in the Housing Elements of each city and the County as a whole is expected to meet the housing needs of existing and future residents in San Bernardino County. Demand for commercial goods and services is expected to be met by existing businesses and new business ventures that serve the marketplace. This may include businesses not just in the County but in adjacent cities and counties as well.

Public service demands by future residents are expected to be met by public service providers in the County, including the City of Rancho Cucamonga. This is discussed in Section 4.14, Public Services, of this EIR. Cumulative impacts are expected to be less than significant.

No significant cumulative adverse impacts on population, housing, or employment are expected from the proposed 2010 General Plan Update and future development and redevelopment in the County.

4.13.8 MITIGATION MEASURES

No significant adverse impacts on population, housing or employment have been identified; therefore, no mitigation is required.

4.13.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Population Growth

Less Than Significant.

Displacement of Housing and People

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.14 PUBLIC SERVICES

This section describes existing public services for the City of Rancho Cucamonga and its SOI, and addresses potential impacts related to the following services:

- Fire protection (City of Rancho Cucamonga),
- Police protection (County of San Bernardino),
- Schools (City of Rancho Cucamonga),
- Library Services (City of Rancho Cucamonga).

4.14.1 RELEVANT POLICIES AND REGULATIONS

Federal

There are no Federal regulations applicable to the proposed 2010 General Plan Update regarding public services.

State

Senate Bill 50

Senate Bill 50 (SB 50 or the “Leroy Greene School Facilities Act”), enacted in 1998, represents the most significant school facility finance and developer fee reform legislation for school facilities construction and modernization since the adoption of the 1986 School Facilities Act. Section 65995 of the *California Government Code* establishes the statutory criteria for assessing construction fees. The legislation recognizes the need for fees to be adjusted periodically to keep pace with inflation; therefore, the State of California Department of General Services State Allocation Board increases the maximum fees according to the adjustment for inflation in the statewide cost index for Class B construction. The payment of school mitigation impact fees authorized by SB 50 is deemed to provide full and complete mitigation of project impacts on school facilities pursuant to Section 65995 of the *California Government Code*. SB 50 provides that a State or local agency may not deny or refuse to approve the planning, use, or development of real property on the basis of a developer’s refusal to provide mitigation in amounts in excess of that established by SB 50.

4.14.2 EXISTING CONDITIONS

Fire Protection Services

Fire protection services for the Study Area are provided by the Rancho Cucamonga Fire District (the Fire District). The Fire District provides fire protection and emergency medical response services to approximately 50 square miles in and around the City limits. The Fire District operates 6 fire stations and employs a total of 109 personnel (Hogle 2009c). Table 4.14-1 provides a description of each of the six fire stations and Exhibit 4.14-1, Public Facilities, graphically depicts the locations.

**TABLE 4.14-1
 FIRE PROTECTION FACILITIES**

Station	Address	Equipment
171	6627 Amethyst Avenue	Medic Engine 171, Medic Squad 171, Paramedic Squad
172	9612 San Bernardino Road	Medic Engine 172
173	12770 Firehouse Court	Medic Engine 173
174	11297 Jersey Boulevard	Medic Engine 174, Truck Company 174, Shift Fire Inspector
175	11108 Banyan Street	Medic Engine 175, Medic Rescue, Technical Rescue Unit, Shift Battalion Chief
176	5840 East Avenue	Medic Engine 176
Source: Hogle-Ireland 2009.		

The City has plans for a new fire station (the Northwest Fire Station) to be located on the west side of Hellman Avenue, north of Wilson Avenue and south of Hillside Road. The proposed property is a vacant lot previously owned by the County Flood Control District. The new station is a proposed 1-story structure, approximately 6,000 square feet in size, and characterized by residential design. The proposed station will house a paramedic engine (Rancho Cucamonga 2010b).

Law Enforcement Services

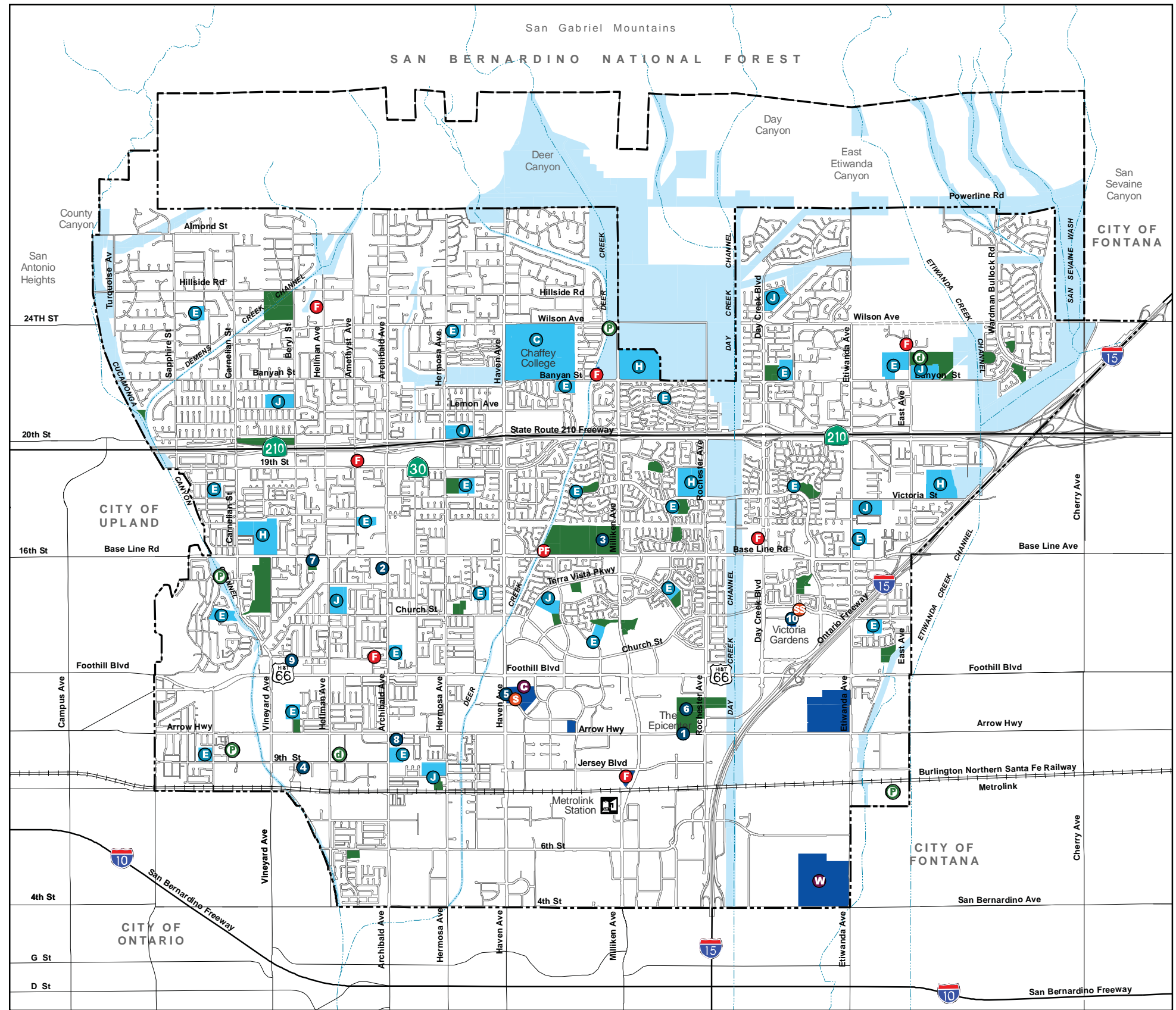
The City of Rancho Cucamonga contracts with the San Bernardino County Sheriff’s Department (SBSD) for law enforcement services. The City began contracting with the Sheriff’s Department in 1978. Law enforcement services provided by the Sheriff’s Department include traffic services, investigations, and safety services. SBSB currently has 143 sworn officers and 19 reserves (Cabana 2009). SBSB is divided into six different areas for patrol (called “beats”) that cover the following geographic areas:

- **Beat Area 1:** The northwest portion of the City
- **Beat Area 2:** The southwestern portion of the City
- **Beat Area 3:** The southernmost corridor and industrial parks
- **Beat Area 4:** The easternmost portion of the City
- **Beat Area 5:** The eastern and western central portions of the City
- **Beat Area 6:** The middle portion of the City, north of Base Line Road

The size of the beat areas is determined by population and service calls (Rancho Cucamonga 2001a).

With a population of over 175,000 residents, the ratio of officers to residents is approximately 1 officer for every 1,080 residents. The Department’s average response time is 3 minutes and 21 seconds (Cabana 2009).

The approximate 30,000-square-foot SBSB headquarters is located at 10510 Civic Center Drive. There is one sheriff’s substation located within the City of Rancho Cucamonga at Victoria Gardens and plans are proposed for the North End Substation to be located at the southwest corner of Milliken Avenue and Grizzly Drive. Exhibit 4.14-1 shows the locations for the SBSB headquarters as well as the Victoria Gardens sheriff’s substation. All SBSB training facilities



- Public Facility Land Use Designations**
- Civic/Regional (Max. 1.0 FAR)
 - Schools (Max. 0.20 FAR)
 - Parks
 - Flood Control/Utility Corridor

- Schools and Parks**
- E Elementary School
 - J Junior High/Middle School
 - H High School
 - C College
 - P Future Park¹
 - D Dog Park

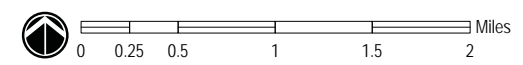
- Public Safety Facilities**
- F Fire Station
 - F+ Future Fire Station
 - S Sheriff's Station
 - SS Sheriff's Sub-Station

- San Bernardino Government Facilities**
- C Rancho Cucamonga Courthouse
 - W West Valley Detention Center

- City Facilities**
- 1 Animal Care and Adoption Center
 - 2 Archibald Library
 - 3 Central Park: Senior and Community Centers
 - 4 City Corporate Yard
 - 5 Civic Center
 - 6 Epicenter/Adult Sports Complex
 - 7 Lions Center East and West
 - 8 RC Family Resources Center
 - 9 RC Family Sports Center
 - 10 Victoria Gardens Cultural Center (Theater/Library)

- Rancho Cucamonga City Boundary
- Sphere of Influence

Notes: 1. Location of future parks are not fixed and may be adjusted to accommodate future planning needs.



Public Facilities

Rancho Cucamonga General Plan Update

Source: Hogle Ireland 2010

Exhibit 4.14-1



used are located in the City of San Bernardino at the San Bernardino County Sheriff-Coroner Department's Training Center and Academy (Hogle-Ireland 2009c).

SBSD has one of the largest volunteer units in the Inland Empire. The number of volunteer hours dedicated to the department and the City continues to be the highest in the County. There are currently four volunteer units that help support the SBSB (Hogle-Ireland 2009c).

Schools

Four elementary school districts, one high school district, and one community college district serve the Study Area. Primary public education services are provided by the Alta Loma School District, which serves the northwestern section of the City; the Central School District, which serves the west-central portions; the Cucamonga School District, which serves the southern portions; and the Etiwanda School District, which serves the eastern portion of the City and a portion of the City of Fontana. The unincorporated SOI area to the north is served by the Alta Loma School District and Etiwanda School District (Rancho Cucamonga 2009b). District boundaries and individual school locations are shown on Exhibit 4.14-2, School District Boundaries.

The Chaffey Joint Union High School District provides all secondary public education within the Study Area. The District operates four high schools, including Alta Loma High School on the west, Rancho Cucamonga High School in the central area, Etiwanda High School on the east, and Los Osos High School in the north-central portion of the City (Rancho Cucamonga 2009b). Table 4.14-2 identifies the current enrollment and capacity for each of the school districts that serve the Study Area, as well as capacity for the Alta Loma and Etiwanda School Districts.

**TABLE 4.14-2
CURRENT ENROLLMENT AND CAPACITY OF SCHOOL DISTRICTS
SERVING THE STUDY AREA**

School District	Total Current Enrollment ^a	Total School Design Capacity	Temporary Facilities/Portables	Plans for Expansion
Alta Loma School District	6,553	6,436	Yes	No
Central School District	4,855	-	Yes	No
Cucamonga School District	2,700	-	-	-
Etiwanda School District	12,580	16,948	Yes	Yes (outside the Study Area).
Chaffey Joint Union High School District	25,444	10,240 ^b	Yes	No

^a The total current enrollment and capacity figures reflect all schools within each district. The schools are located within and outside the Planning Area.
^b This includes design capacity for the following high schools: Rancho Cucamonga, Alta Loma, Etiwanda, and Los Osos.
 -: Information is not available.
 Source: Kadlec 2009; Harrison 2009; Cucamonga School District 2009; Sozar 2009; Cooper 2009.

The student generation factor for each school district, except the Cucamonga School District, is provided below in Table 4.14-3.

**TABLE 4.14-3
STUDENT GENERATION FACTORS**

School District	Generation Rates		
	Single-Family Detached	Single-Family Attached	Multi-Family
Cucamonga School District	-	-	-
Etiwanda School District	0.5397	0.1723	0.1579
Chaffey Joint Union High School District	0.196	0.064	0.0856
	K-6	6-8	K-8
Alta Loma School District	0.44	0.15	0.59
Central School District	0.25	0.16	0.40
-: Information is not available.			
Source: Kadlec 2009; Harrison 2009; Cucamonga School District 2009; Sozar 2009; Cooper 2009.			

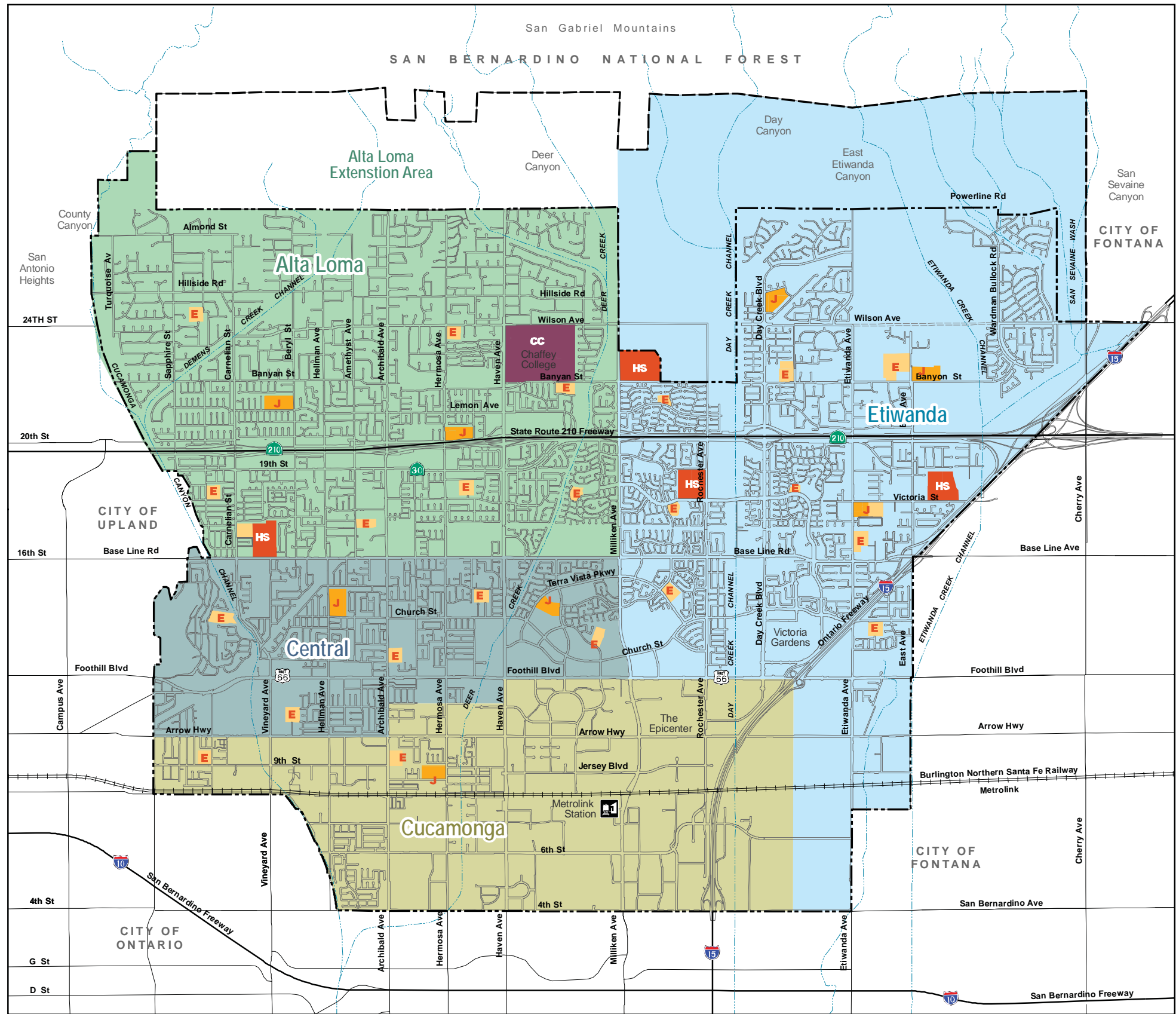
Chaffey Community College serves the Rancho Cucamonga community and surrounding areas. The College was founded in 1883 as a private college, but has been a publicly funded college since 1916. Chaffey Community College occupies a 200-acre site along north Haven Avenue within the City limits. The College offers a variety of educational programs, including Business and Applied Technology; Health Sciences; Language Arts; Mathematics and Science; Social and Behavioral Sciences; and Visual, Performing, and Communication Arts (Chaffey College 2009).

Library Services

Prior to 1994, the City of Rancho Cucamonga provided library services to the community through a contract with the San Bernardino County Library Department. The Rancho Cucamonga Library at Archibald (the Archibald Library) was the first municipal library in the City of Rancho Cucamonga. Exhibit 4.14-1 provides the location of Archibald Library. The library opened its doors on September 24, 1994. The City of Rancho Cucamonga decided to take over operation of the library because it felt it could better serve the residents of the City by offering extended hours, a larger and more current book collection, and up-to-date library technology. As a result, the library has added a bookmobile, a literacy program, an after-school tutoring program, and a second library location (the Paul A. Biane Library) (Rancho Cucamonga 2008). Together, the libraries house approximately 250,000 items (Perera 2009).

The Rancho Cucamonga Library has consistently been one of the busiest libraries in California. The existing library facility is approximately 22,500 square feet and houses more than 140,000 items (Perera 2009). In 2008, the library was renovated to include cosmetic upgrades (i.e., paint and carpet) as well as a new heating, ventilation, and air conditioning (HVAC) system, roofing, and the addition of 25,000 items (Perera 2009). The library was reopened to the public on September 13, 2008.

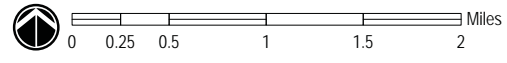
The Paul A. Biane Library at Victoria Gardens opened on August 18, 2006. The library contains a new book and media collection of 100,000 items, a 21-seat technology center, a story room, and a traditional reading room. The existing library facility is approximately 23,000 square feet. There is an additional 14,000 square feet shell (unused space) of the library located on the second level (Perera 2009).



- School Districts**
- Alta Loma School District
 - Central School District
 - Cucamonga School District
 - Etiwanda School District

- School Types**
- E Elementary School
 - J Junior High/Middle School
 - HS High School
 - CC Chaffey Community College

- Rancho Cucamonga City Boundary
- Sphere of Influence



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School District Boundaries

Rancho Cucamonga General Plan Update

Source: Hogle Ireland 2010

Exhibit 4.14-2



4.14.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist Form included as Appendix G of the CEQA Guidelines. The project would result in a significant impact related to public services if it would:

Threshold 4.14a: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services;

Threshold 4.14b: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services;

Threshold 4.14c: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools; and/or

Threshold 4.14d: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services.

4.14.4 GENERAL PLAN GOALS AND POLICIES

General Plan Goals and Policies

A number of goals, policies, and programs in the proposed 2010 General Plan Update address public services in the City. Implementation of these goals, policies, and programs would reduce impacts related to public services to existing and future developments. These include those listed below.

GOAL PF-1: Provide state-of-the-art public and community facilities that support existing programs, accommodate future needs, and are accessible to all members of the community.

Policy PF-1.1: Continue to implement high-quality standards for new public facilities and improvements to existing buildings.

Implementation Action: *Design and build all City buildings to serve as a model for quality architectural treatment and green building design in all new and remodeled civic facilities.*

Policy PF-1.2: Promote community facilities as focal points for gatherings, events, and celebrations.

Implementation Action: *Maintain all public facilities and buildings to address the needs of the various neighborhoods within the City. Advertise the availability of civic facilities to community groups.*

Policy PF-1.3: Locate new community facilities in neighborhoods and centers where they will serve populations with the greatest needs.

Implementation Action: *Review and assess the needs for the location of community facilities as neighborhoods evolve.*

Policy PF-1.4: Maintain public facilities and optimize their usefulness during their lifespan.

Implementation Action: *Continue with proper maintenance programming and funding levels for existing public facilities.*

Policy PF-1.5: Continue to incorporate low-maintenance features into public facilities consistent with the City's sustainability plan.

Implementation Action: *Replace features of public facilities with lower maintenance types as part of the on-going maintenance program.*

Policy PF-1.6: Maintain multi-functional, flexible, and complementary space at community facilities.

Implementation Action: *Maintain all public facilities and buildings to address the needs of the various neighborhoods within the City. Advertise the availability of civic facilities to community groups.*

Policy PF-1.7: Maximize public facility use by sharing with nonprofit organizations, school districts, and community organizations. Look for opportunities to create joint-use community space at facilities owned by private organizations such as faith-based groups and service clubs.

Implementation Action: *Continue to promote the City's various rental facility types by ensuring that a complete summary of locations, facilities, services, fees, and applications are available.*

GOAL PF-2: *Improve access for all Rancho Cucamonga residents to high-quality educational opportunities that satisfy each individual's needs, desires, and potential.*

Policy PF-2.1 Consult with local school districts to enhance the development of joint-use agreements, allowing for optimum use of school facilities, to provide broad community benefits such as public safety and education.

Implementation Action: *Continue and expand joint use facilities to achieve even greater optimization of school facilities to service the entire community.*

Policy PF-2.2: Consider the needs of the school districts that serve Rancho Cucamonga in future planning and development activities.

Implementation Action: Continue a collaborative approach involving City and school district facilities.

Policy PF-2.3: Partner with local public and private schools and Chaffey Community College to maintain effective educational programs for residents of all ages.

Implementation Action: Plan for regular consultation with local public and private schools and Chaffey Community College to identify populations that most need educational programs. Supplement the efforts of those agencies with City programs as needed and as resources allow.

Policy PF-2.4: Consult with school districts to explore grant funding opportunities for joint City and school district partnerships and programs.

Implementation Action: Continue a collaborative approach involving City and school district facilities.

GOAL PF-3: Provide high-quality library resources to meet the educational, cultural, civic, and business needs of all residents.

Policy PF-3.1: Continue to provide high-quality library services to the community, including supporting the Archibald Library and Paul A. Biane Library.

Implementation Action: Continue to employ short-, medium- and long-term strategies to sustain quality library services to the community. Expand current levels of service by expanding document collections, improving storage capacity, providing expanded hours of operation, providing continuous on-line access, and diversifying outlet (physical access) locations.

Policy PF-3.2: Continue to improve the local Libraries system, complete with community facilities that provide knowledgeable, service-oriented staff and offer access to information, books, and other materials in a variety of formats, including emerging technologies. Consider future options for providing library services that are flexible, and will maximize library services while keeping costs affordable.

Implementation Action: Continue to employ short-, medium- and long-term strategies to sustain quality library services to the community. Expand current levels of service by expanding document collections, improving storage capacity, providing expanded hours of operation, providing continuous on-line access, and diversifying outlet (physical access) locations.

Policy PF-3.3: Continue to foster pride in the Library as a place for the entire community.

Implementation Action: Continue to employ short-, medium- and long-term strategies to sustain quality library services to the community. Expand current levels of service by expanding document collections, improving storage capacity, providing expanded hours of operation, providing continuous on-line access, and diversifying outlet (physical access) locations.

Policy PF-3.4: Lead by example by successfully considering the full "life-cycle" cost for new public library facilities and improvements to existing library facilities.

Implementation Action: Utilize green building approaches in the design of all new and remodeled library facilities.

Policy PF-3.5: Assist and support life-long learning for adults through computer training programs and comprehensive library collections.

Implementation Action: Continue with outreach programs to City residents seeking computer skills. Budget for expanded computer resources.

Policy PF-3.6: Encourage non-exclusive, cross-generational cultural activities and resources that are accessible to people of all ages and backgrounds.

Implementation Action: Plan for activities that respond to identified needs.

Policy PS-1.1: Reduce the loss of life, property, and injuries incurred as a result of fires by offering and supporting comprehensive fire prevention, public education, and emergency response programs.

Implementation Action: Continue to promote and implement the recommendations of the Fire District Strategic Plan.

Policy PS-1.3: Continue to provide high-quality patient care with cross-trained firefighter/paramedics and emergency medical technicians. Improve the level of patient care in the community through the development and implementation of innovative emergency medical service delivery strategies.

Implementation Action: Assess and develop a timeline to add personnel and equipment to ensure that the quality of emergency medical services is retained consistent with City objectives and available resources.

Policy PS-1.4: Work with the Police Department to expedite the investigation of fires associated with arson.

Implementation Action: Provide the Police Department with resources as requested, consistent with the annual budget.

Policy PS-1.5: Promote a high quality of life and safety for all residents with community safety education campaigns and comprehensive fire and injury prevention programs.

Implementation Action: Expand the information tools utilized by the City in coordination with the Fire District to provide educational materials on how to minimize risks associated with wildland fires.

Policy PS-1.6: Minimize life and property loss and injuries by maintaining a comprehensive technical rescue program.

4.14.5 STANDARD CONDITIONS OF APPROVAL

Standard Conditions

SC 4.14-1 Prior to issuance of the first building permit for a specific project, the Property Owner/Developer shall comply with all applicable codes, ordinances and standard conditions, including the current edition of the California Fire Code and

the Rancho Cucamonga Municipal Code, regarding fire prevention and suppression measures, fire hydrants, automatic fire extinguishing systems, fire access, and water availability, among other measures.

SC 4.14-2 Prior to the issuance of the first building permit for a specific project, the Property Owner/Developer shall pay applicable developer's fees to the impacted school district(s) pursuant to Section 65995 of the *California Government Code*. Under State law, payment of the developer fees provides full and complete mitigation of the project's impacts on school facilities. Evidence that these fees have been paid in compliance with Senate Bill (SB) 50 shall be submitted to the Building Department.

4.14.6 ENVIRONMENTAL IMPACTS

Fire Protection

Threshold 4.14a: **Would the proposed General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?**

Implementation of the proposed 2010 General Plan Update could result in the development of up to 7,584 dwelling units throughout the Study Area. Implementation of the proposed General Plan Update would introduce new structures and additional residents to the Study Area, thus increasing the demand for the fire protection services that the City provides. The City is currently in the planning stages for a new fire station (the Northwest Fire Station) to be located on the west side of Hellman Avenue, north of Wilson Avenue, within the City of Rancho Cucamonga. Because the City would have more structures at buildout of the proposed General Plan Update, the potential for structural fires would increase. Therefore, the demand for fire protection services, including fire protection resources such as staff and equipment, would increase as the proposed General Plan Update is implemented. Future funding for these additional resources would be provided through the City's general fund, which is maintained through the collection of taxes. No new structural facilities beyond that already planned for would be needed and impacts related to the construction of the new fire station are considered on a programmatic level as part of the proposed land use plan (identified as "Future Fire Station" on Exhibit 4.14-1) and evaluated throughout this PEIR. Specific construction-level plans would be addressed in separate documentation required pursuant to CEQA.

Implementation of SC 4.14-1 would require future projects to be reviewed by the City and to comply with all applicable requirements prior to the issuance of building permits in order to ensure the safety of each future project being considered and, potentially, lessen the future demand for fire protection services by creating more fire-resistant structures. Impacts would be less than significant; no mitigation is required.

Impact 4.14a: Development of the proposed 2010 General Plan Update would create additional demand for fire protection services, which would be funded through the City's general fund. Compliance with SC 4.14-1 would ensure that future projects are reviewed by the City prior to the issuance of building permits. Impacts would be less than significant; no mitigation is required.

Law Enforcement

Threshold 4.14b: **Would the proposed General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?**

Implementation of the proposed 2010 General Plan Update could result in the addition of approximately 24,300 residents, resulting from the development of 7,584 dwelling units throughout the Study Area. Based on the City's current officer to population ratio of 1 officer for every 1,080 residents, the incremental development resulting from implementation of the 2010 General Plan Update would result in the demand for approximately 23 new law enforcement officers to maintain the current level of service. As previously noted, SBSD's current response time is 3 minutes and 21 seconds. Without additional staff, future development under the proposed 2010 General Plan Update has the potential to impact SBSD's current response time. This increase in demand for police services would be met through the hiring of additional staff, as needed, which would be funded through existing funding mechanisms such as the general fund revenue and grant funding. Therefore, impacts related to police services would be less than significant; no mitigation is required.

Impact 4.14b: Development of the proposed 2010 General Plan Update would create additional demand for police protection services which would be funded through the City's general fund or other existing funding mechanisms. Impacts would be less than significant; no mitigation is required.

Schools

Threshold 4.14c: **Would the proposed General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools?**

Implementation of the proposed 2010 General Plan Update would result in the development of up to 7,584 dwelling units throughout the Study Area. As shown on Table 4.14-3, each school district has different student generation factors. Assuming a worst-case combined student generation rate (single-family and multi-family student generation rate of 0.5 elementary/middle school students per dwelling unit), approximately 3,792 new elementary/middle school students would be generated over the buildout period of the proposed General Plan Update.

Based on discussions with each of the school districts, only Etiwanda School District is currently planning to construct new schools. However, this District is not looking to construct schools within the Study Area. The other school districts have indicated that no new schools are planned for future development within the Study Area. Furthermore, there is currently excess capacity at all Study Area schools. It is therefore reasonable to assume that schools within the Planning Area could accommodate the increase in students generated from implementation of the proposed 2010 General Plan Update. Based on discussions with Chaffey Joint High School

District, there is potential for the District to replace existing portables with permanent buildings in the future; this would result in a permanent capacity increase.

Pursuant to SB 50, each of the school districts can collect school impact fees as new development occurs which would serve to fund additional school resources (SC 4.14-2). While these impact fees may not provide full funding for all necessary resources, impacts would be less than significant pursuant to SB 50. Therefore, buildout of the proposed 2010 General Plan Update would result in a less than significant impact related to schools; no mitigation is required.

Impact 4.14c: Development of the proposed 2010 General Plan Update would create additional demand for schools. Compliance with SC 4.14-2 would ensure that future projects pay applicable developer's fees in compliance with SB 50. Therefore, impacts would be less than significant; no mitigation is required.

Libraries

Threshold 4.14d: Would the proposed General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services?

Implementation of the proposed 2010 General Plan Update would add approximately 7,584 dwelling units and approximately 24,300 residents to the Study Area under the proposed 2010 General Plan Update at buildout. An increase in residents under the proposed 2010 General Plan Update would substantially increase the demand for library services.

Based on discussions with library personnel, the library is always looking to expand as the demand for library materials and services increase. As stated previously, the Paul A. Biane Library at Victoria Gardens has an additional 14,000 square foot shell of vacant library space that is not currently utilized; however, there is potential for future use. The City does not have any currently planned library facilities within the Study Area. Therefore, the residents associated with future development of the proposed General Plan Update would significantly impact existing library services. The demand for library services would be met through implementation of the goals and policies identified in the Public Facilities and Infrastructure Chapter of the General Plan (PF 3.1 through PF 3.6).

Impact 4.14d: Development of the proposed General Plan Update would create additional demand for library services. Compliance with applicable 2010 General Plan Update goals and policies (PF 3.1 through PF 3.6) would ensure that impacts to library services would be less than significant; no mitigation is required.

4.14.7 CUMULATIVE IMPACTS

Future growth under the proposed 2010 General Plan Update within the City of Rancho Cucamonga and the SOI would include the introduction of new structures and the generation of additional population, which would create an increased demand for fire protection and law enforcement services. Additionally, anticipated increases in population would create additional demand for library services. All new growth would occur in compliance with applicable goals and

policies of the proposed 2010 General Plan Update and standard conditions. Therefore, potential impacts related to fire protection, police services, and libraries would be less than significant and would not be cumulatively considerable.

Future development under the proposed 2010 General Plan Update when combined with anticipated growth within adjoining jurisdictions that are served by the same school districts would result in an increased student population. However, all new growth would occur in compliance with applicable goals and policies of the proposed 2010 General Plan Update and standard conditions such as SB 50. Therefore, potential impacts related to schools would be less than significant and would not be cumulatively considerable.

4.14.8 MITIGATION MEASURES

With implementation of the relevant goals and policies in the proposed 2010 General Plan Update and compliance with the standard conditions, no significant adverse impacts related to public services are expected. Thus, no mitigation measures are recommended.

4.14.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Fire Protection

Less Than Significant.

Law Enforcement

Less Than Significant.

Schools

Less Than Significant.

Libraries

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.15 PARKS AND RECREATION

This section discusses parks and recreational facilities in the City of Rancho Cucamonga, based on a review of information available from the City's Community Services Department, the adopted Rancho Cucamonga General Plan, and the draft Community Services Chapter of the proposed 2010 General Plan Update.

4.15.1 RELEVANT POLICIES AND REGULATIONS

Laws, regulations, and codes that address parks and recreational facilities and services in the City are discussed below.

State

Quimby Act

California allows a city or county to pass an ordinance that requires, as a condition of approval of a subdivision, either the dedication of land, the payment of a fee in lieu of dedication, or a combination of both for park or recreational purposes (*California Government Code*, Section 66477). This legislation, commonly called the "Quimby Act", establishes a maximum parkland dedication standard of 3 acres of parkland per 1,000 residents for new subdivision development unless the amount of existing neighborhood and community parkland exceeds that limit.

Local

Residential Recreation Areas and Facilities

Section 17.08.040 of the City's Development Code contains special development criteria for Residential Districts; it states the required provisions of private and common open space areas and recreational facilities by all residential developments. The standards include a requirement for private open space on the ground floor ranging from 150 square feet per unit in the High Density Residential district to 2,000 square feet per unit in the Very Low Density Residential district. Also, at least 30 percent of the site should be common open space in the Medium, Medium High, and High Density Residential Districts. Of the total area of private and common open space, approximately 35 to 65 percent should be useable open space, depending on the district.

In addition, developments with 30 units or less are required to provide 3 recreational areas and facilities in the form of a large open lawn area, an enclosed tot lot, a spa/pool area, and/or barbecue facility (grill and benches, etc.). Developments with 31 to 100 units must provide 2 sets of 3 recreational areas and facilities (open lawn area, enclosed tot lot, spa/pool, and/or barbecue facility). Developments with 101 to 200 units must provide 5 recreational areas and facilities, consisting of a large open lawn, multiple tot lots, pool and spa, community multi-purpose rooms, barbecue facilities, court facilities (e.g., tennis courts, basketball courts), and/or jogging/walking trails. Another set of 5 recreational areas and facilities is required for each 100 units above the first 200 units.

Local Park Ordinance

The City's Local Park Ordinance (Ordinance No. 105) has been incorporated into the City's Municipal Code as Chapter 16.32 - Park and Recreational Land. This ordinance requires developers of residential projects to dedicate land and/or pay in-lieu fees for the provision of

parklands at a standard of 3 to 5 acres of parkland per 1,000 residents of the new development. The provision of on-site open space and recreational facilities may be credited against the parkland dedication and/or fee requirement at the discretion of the Planning Commission.

Hiking and Riding Trails Master Plan

The City's Hiking and Riding Trails Master Plan identifies a system of regional and community trails, needed bridges and street undercrossings, and trailheads to access the trail system at various locations throughout the City.

The Regional Multi-Purpose Trail serves as the backbone of the trail system and connects to regional parks, open space preserves, the San Bernardino National Forest, and other regional trails beyond the City. The trail generally proceeds along flood-control channels and utility corridors. A Regional Multi-Purpose Trail follows the east-west route of the old Pacific Electric Railroad as part of the 21-mile Pacific Electric Inland Empire Trail. When completed, this trail will connect the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto.

Community Trails provide convenient off-road access to community facilities such as parks, schools, and shopping centers. They serve as collectors that link local feeder trails in subdivisions to the regional trail system. Community trails follow streets, utility corridors, and easements and are intended for equestrian and pedestrian use. The North Etiwanda Preserve Trail is an interpretive trail system providing over three miles of public trail access through the Northern Etiwanda Preserve. The trail connects local points of interest, including historic water delivery system and pumping station remnants, early settlers ruins, a Native American cultural site, riparian wetlands, and a fresh water marsh.

Local feeder trails are found within residential subdivisions as private easements. They provide access to the rear of every lot, wherever feasible, to a Community or Regional Multi-Purpose Trail. Local feeder trails can also provide logical riding loops within subdivisions. Neighborhoods in Alta Loma and Etiwanda include a network of equestrian trails that connect to Community and Multi-Use Regional Trails. The Victoria Park Lane Trail and the Terra Vista Greenway provide pedestrian and bike connections between schools and parks through the Victoria Park and Terra Vista neighborhoods.

Exhibit 4.15-1, Hiking and Regional Trails, shows the existing and proposed trails in the City's Hiking and Riding Trails Master Plan.

4.15.2 EXISTING CONDITIONS

The City of Rancho Cucamonga has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, 3 community parks, and 8 special use facilities. Table 4.15-1, lists these facilities, and Exhibit 4.15-2, Parks and Special Use Facilities, shows their general locations.

**TABLE 4.15-1
PARKS AND SPECIAL USE FACILITIES**

Map ID	Park Name	Location	Developed Acreage
Neighborhood Parks			
1	Bear Gulch Park	9094 Arrow Highway	5.0
2	Beryl Park East	6524 Beryl Street	10.0
3	Beryl Park West	6501 Carnelian Street	10.0
4	Church Street Park	10190 Church Street	6.5
5	Coyote Canyon Park	10987 Terra Vista Parkway	5.0
6	Day Creek Park	12350 Banyan Street	11.0
7	Ellena Park	7139 Kenyon Way	6.5
8	Garcia Park	13150 Garcia Drive	5.5
9	Golden Oak Park	9345 Golden Oak Road	5.0
10	Hermosa Park	6787 Hermosa Avenue	10.0
11	Kenyon Park	11481 Kenyon Way	6.5
12	Legacy Park	5858 Santa Ynez Plaza	3.7
13	Lions Park	9161 Base Line Road	1.5
14	Milliken Park	7699 Milliken Avenue	10.0
15	Mountain View Park	11701 Terra Vista Parkway	5.0
16	Old Town Park	10033 Feron Boulevard	5.0
17	Olive Grove Park	13931 Youngs Canyon Road	7.9
18	Ralph M. Lewis Park	7898 Elm Street	9.5
19	Rancho Summit Park	5958 Soledad Way	6.6
20	Spruce Avenue Park	7730 Spruce Avenue	5.0
21	Victoria Arbors Park	7429 Arbor Lane	9.1
22	Victoria Groves Park	6840 Fairmont	6.5
23	Vintage Park	11745 Victoria Park Le	6.5
24	West Greenway Park	7756 Meadowcrest Court	5.0
25	Windrows Park	6849 Victoria Park Lane	8.0
<i>Total Neighborhood Park Acreage</i>			<i>170.3</i>
Community Parks			
26	Etiwanda Creek Park	5939 East Avenue	12.0
27	Heritage Community Park	5546 Beryl Street	40.0
28	Red Hill Community Park	7484 Vineyard Avenue	44.0
<i>Total Community Park Acreage</i>			<i>96.0</i>
Special Use Facility			
29	Rancho Cucamonga Adult Sports Complex	8378 Rochester Avenue	41.6
30	Rancho Cucamonga Central Park; James L. Brulte Senior Center and Goldy S. Lewis Community Center	11200 Base Line Road	35.0
31	Confluence Park	Demens Creek Channel and Cucamonga Canyon Channel	0.2
32	Lions Center East	9191 Base Line Road	0.2
33	Lions Center West	9161 Base Line Road	0.3
34	Rancho Cucamonga Family Sports Center	9059 San Bernardino Road	0.8
35	Victoria Gardens Cultural Center	12505 Cultural Center Drive	3.0
36	RC Resource Center	9791 Arrow Highway	0.2
<i>Total Special Use Facilities Acreage</i>			<i>81.3</i>
TOTAL ACREAGE			347.6
Source: Hogle-Ireland 2009d.			

In addition to the parks and special facilities listed in Table 4.15-1, the City's Multi-Use Regional and Community Trails add approximately 295 acres of land for recreational use (see Exhibit 4.15-1). The trails provide a network of interconnecting off-road, urban, and wilderness trails that allow horseback riding, hiking, jogging, running, and walking into open space areas and connect the residential areas to commercial activity centers.

Also, various areas in the City and SOI will remain largely undeveloped and will provide natural open spaces. These include designated Conservation areas and Flood Control and Utility Corridors and areas designated as Open Space (with a maximum density of 1 dwelling unit per 10 acres) and Hillside Residential (with a maximum density of 2 units per acre). These areas are shown in Exhibit 4.15-3, Open Space and Conservation Areas.

Private recreational facilities complement the City's parks, trails, and bikeways and include the 128-acre Red Hill Country Club Golf Course and Tennis Center and the 144-acre Empire Lakes Golf Course. Joint-use agreements with 5 school districts and the City offer use of the recreational facilities during evenings and weekends at 22 elementary schools, 8 middle schools and 4 high schools, which include athletic fields, playgrounds, basketball courts, and other facilities. Chaffey College also provides access to a wide range of athletic facilities during non-school hours.

A number of additional parks are planned for development in the City. A new Community Park will be built along northern Milliken Avenue near Los Osos High School. A new Special Use Facility - the Napa Soccer Complex - is proposed at the southeastern portion of the City near Etiwanda Avenue to provide sports fields for use by youth leagues. Neighborhood Parks are proposed in the southwestern portion of the City, with one park along the Cucamonga Canyon Channel south of Base Line Road, and another park along Madrone Avenue. Plans to complete Central Park and expand Etiwanda Creek Park will further expand the City's park system.

As of 2009, the City's population was estimated at 177,736 residents. With 642.2 acres of existing parks and recreational facilities, the City currently provides 3.58 acres per 1,000 residents. However, the City has established a park standard of 5.0 acres for every 1,000 persons, which requires a total of 896.0 acres of parkland to meet the standard. With the existing total area of 642.2 acres of parkland, trails and special use facilities, this translates to a deficit in parkland of 253.8 acres. Approximately 160 acres of new parks are planned, along with 36.5 acres of proposed trails. This will reduce the current parkland deficiency (at the 5 acres per 1,000 residents standard) to 57.3 acres.

4.15.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. A project would result in a significant adverse impact on parks and recreation if it would:

Threshold 4.15a: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;

Threshold 4.15b: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment; and/or

Threshold 4.15c: Result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which would cause

significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for park services.

4.15.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address the current availability and future provision of parks and recreational services in the City. Implementation of these goals and policies would lead to the provision of adequate parkland and recreational facilities to existing and future developments. These include the goals and policies and corresponding implementation actions listed below.

GOAL CS-1: Provide attractive, high-quality community services facilities that adequately meet the community's need.

Policy CS-1.1: Provide adequate park and recreational facilities that meet the City standard of 5.0 acres of parkland (including trails and special facilities) for every 1,000 persons.

Implementation Action: *Continue to assess that the recreational needs of the City's residents are consistent with the City's parkland standard, and determine possible reuse or conversion of infill sites for recreational uses to serve areas within the City with a disproportionate amount of parkland.*

Policy CS-1.2: Develop parks that contribute to active and healthy lifestyles, and allow for a balanced commitment to both organized recreation activities and passive park environments.

Implementation Action: *Move forward with plans to continue to develop Central Park, expand Etiwanda Creek Park, add one new Community park, one new Special Use Facility, and two new Neighborhood parks. Incorporate active and passive facilities into new parks.*

Policy CS-1.3: Continue to develop Central Park as envisioned in the Central Park Master Plan.

Implementation Action: *Continue to prioritize implementation of the improvements for Central Park as part of the City's CIP process.*

Policy CS-1.4: Pursue developing an outdoor special use facility that includes a multi-field sports complex.

Implementation Action: *Continue to prioritize development of a sports complex and determine funding mechanisms, including corporate sponsorships/partnerships.*

Policy CS-1.5: Continue to require new development to provide needed park facilities through the various measures and tools available to the City (e.g., in-lieu fees and/or land dedication).

Implementation Action: *Continue to make the provision of turn-key park and recreational facilities the first priority over in-lieu fees for new residential development.*

Policy CS-1.6: Pursue and expand joint use of public lands that are available and suitable for recreational purposes, including school district properties and flood control district, water district, and other utility properties.

Implementation Action: *Continue to coordinate with other agencies holding public lands for possible joint use, trail easements, or re-use to serve park/recreation needs, particularly with school district properties.*

Policy CS-1.7: Encourage public safety and compatibility with adjacent uses through park location and design, including the location of buildings, lighting, parking, public transit, emergency access, and pedestrian/bicycle access.

Implementation Action: *Continue to utilize the Recreation Needs and System Recommendation Study and the park master plan concept in park planning.*

Policy CS-1.8: Continue to build, renovate, and maintain parks in a manner that is environmentally sustainable.

Implementation Action: *Continue to provide for maintenance, renovation and new construction of City parks in compliance with City policies, upgrading wastewater systems as needed, and as technology evolves, substitute material that could reduce maintenance costs and is environmentally friendly.*

Policy CS-1.9: Develop intermediate sized (10–12 acre) parks with lighted athletic fields and appropriate parking to accommodate community sports programs.

Implementation Action: *Update the City's Recreation Needs and Systems Recommendation Study to determine the location for intermediate-sized park sites specifically developed for athletic field use. This may include joint-use facilities with a school district.*

GOAL CS-6: *Provide a safe, comprehensive network of interconnecting off-road trails with amenities that connect neighborhoods, parks, schools, open space, employment areas, retail services, activity areas, and areas outside the City.*

Policy CS-6.1: Provide a comprehensive, interconnected off-road trail system that provides alternative mobility choices throughout the entire City and increases connectivity.

Implementation Action: *Continue to implement the principles of the Trails Implementation Plan.*

Policy CS-6.2: Connect trails in Rancho Cucamonga to trails in the San Bernardino National Forest and other hillside open space areas. These trails shall include trailheads with vehicle parking and other amenities.

Implementation Action: *Coordinate with Federal and State agencies to facilitate funding and acquisition of trail connections from the City of the San Bernardino National Forest. Connect new trails with the North Etiwanda Preserve.*

Policy CS-6.3: Continue to incorporate, where feasible, Regional and Community Trails along utility corridors and drainage channels.

Implementation Action: Continue to make trail connections within the City on existing public-agency owned properties.

Policy CS-6.4: Continue to maintain and pursue the development of planned trails and facilities for equestrian use within the Equestrian/Rural Area designation.

Implementation Action: Continue to ensure that trails accommodate equestrian users through details outlined in the Trails Implementation Plan within North Alta Loma and Etiwanda.

Policy CS-6.5: Improve existing trails by removing barriers, applying sustainability concepts, improving safety and function, and providing access to adjacent trails.

Implementation Action: Continue to program funding into the CIP for the improvements to deficient equestrian trails, as outlined in the Trails Implementation Plan.

Policy CS-6.6: Require new development to provide access to adjacent trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities) for all new projects located adjacent to Regional or Community Trails.

Implementation Action: Require new development projects adjacent to Regional or Community Trails to provide access to and amenities for trails.

Policy CS-6.7: Continue to credit publically accessible trailway acreage towards meeting parkland dedication standards.

Implementation Action: Continue to allow parkland credit for trails within development projects, subject to adopted criteria.

Policy ED-2.3: Expand recreation and cultural attractions to enhance tourism/visitor potential and to boost sales and transient occupancy tax.

Implementation Action: Develop brochures or links from the City's web site to showcase the various recreational and cultural venues to attract visitors to the City. Enhancement of cultural amenities, including regional entertainment options, recreation, and historic preservation, will help to embellish the City's reputation as a destination for a wide range of visitors.

4.15.5 STANDARD CONDITIONS OF APPROVAL

There are existing regulations that relate to the provision of parks and recreational facilities in the City. Compliance with these standard conditions would meet the demand for parks and recreational facilities from existing and future developments. These include those listed below.

- SC 4.15.1:** For residential development, recreation areas/facilities shall be provided as required by the Development Code.
- SC 4.15.2:** Implementation of the proposed General Plan Update shall comply with the City's Local Park Ordinance, as contained Chapter 16.32 (Park and Recreational Land) of the City's Municipal Code, which requires developers of residential projects to dedicate land and/or pay in-lieu park fees for the provision of parkland at a standard of 3 to 5 acres per 1,000 residents.

4.15.6 ENVIRONMENTAL IMPACTS

Future residential development and redevelopment pursuant to the proposed 2010 General Plan Update would generate a demand and a requirement for the development of additional parks and recreational facilities. Non-residential development is not likely to create a direct demand for parks and recreational facilities.

Existing Park Facilities

Threshold 4.15a: Would the proposed General Plan Update increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Future development and redevelopment of a residential property pursuant to the proposed General Plan Update could lead to an increase in the City's population by approximately 24,300 persons. These residents are expected to create a demand for parks and recreational facilities. They are likely to use both existing and planned parks and recreational facilities in the City.

Table 4.15-2 identifies the type of recreational facilities and projected facility needs at buildout (i.e., 2030).

**TABLE 4.15-2
RECREATION FACILITY NEEDS RATIO FOR RANCHO CUCAMONGA**

Facility	Facility Needs Ratio (facility per population)	Total Facility Demand at Buildout
Softball Fields	1 per 6,500	31
Baseball Fields	1 per 3,500	57
Football Fields	1 per 48,400	4
Soccer Fields	1 per 3,400	59
Basketball Courts	1 per 9,000	22
Picnic Tables	1 per 490	409
Recreational Swimming Pools	1 per 23,950	8
Competitive Swimming Pools	1 per 34,000	6
Tennis Courts	1 per 3,100	65
Golf Courses	1 per 85,800	2
Equestrian Trails ^a	1 per 8,500	24
Roller Hockey Facilities	1 per 65,650	3
Community Centers and Senior Centers	1 per 55,800	4
Indoor Classrooms	1 per 2,250	89
^a The equestrian trails ratio is given at miles per population instead of facility per population. Source: Hogle-Ireland 2009d.		

As shown, the City will require various recreational facilities at buildout to meet the recreational demand of existing and future residents.

The City's Goal CS-1 and supporting policies in the Community Service Element call for the provision of community services facilities that adequately meet the community's need, including policies that set the parkland standard at 5.0 acres per 1,000 residents; expansion of Central Park; an outdoor regional multi-field sports complex, park provision by new residential

development, expanded joint use agreements, and the development of parks with lighted athletic fields. These policies will lead to the increase in parkland acreage in the City to meet the demand of future residents.

Residential development and redevelopment would also provide on-site recreational areas and facilities, as required by the City's Development Code (SC 4.15-1), and would dedicate parkland or pay in-lieu fees for parkland development and/or expansion by the City (SC 4.15-2).

Goal CS-6 and supporting policies in the Community Service Element call for the development of a comprehensive network of trails through an off-road trail system (1) with connection to nearby open space areas; (2) along utility corridors and drainage channels; (3) within the Equestrian/Rural Area Overlay designation; and (4) with improved access.

The Equestrian/Rural Overlay in the proposed Land Use Plan allows for the keeping of horses and other farm animals, subject to regulations specified in the Development Code. New developments within this Overlay Zone are also required to provide community and local trails for equestrian use in accordance with the Hiking and Riding Trails Plan. This Overlay applies to the northern section of the City, north of the SR-210 Freeway. Future development in these areas would lead to the development of new trails to serve residents.

Compliance with the City's Development Code will lead to the provision of private and common open space areas and recreational areas and facilities as part of individual projects (SC 4.15-1). The recreational facilities constructed within individual developments will meet the demand of the on-site population.

In addition, the City's Local Park Ordinance requires developers of residential projects to dedicate land and/or pay in-lieu fees for the provision of parklands at a standard of 3 to 5 acres of parkland per 1,000 residents (SC 4.15-2). However, Policy CS-1.1 in the Community Services Element of the proposed General Plan sets a more stringent standard of 5.0 acres of parkland per 1,000 residents. Future residential development would provide 5.0 acres of parkland per 1,000 residents and thus, would meet City standards. While a deficiency in parkland currently exists, future residential development would provide 5.0 acres per 1,000 residents in accordance with the proposed General Plan. Thus, it will meet the parkland standard and would not contribute to the existing deficiency. Since future demand for parks and recreational facilities will be met by individual residential developments, impacts would be less than significant; no mitigation is required.

Impact 4.15a: Future residential development and redevelopment would create a demand for parks and recreational facilities, which is expected to be met by the provision of on-site recreational areas and parkland dedication/in-lieu fees consistent with local laws. With implementation of relevant General Plan goals and policies and SCs 4.15-1 and 4.15-2, impacts associated with future development and redevelopment under the proposed General Plan Update would be less than significant; no mitigation is required.

New and Altered Park Facilities

Threshold 4.15b: Would the proposed General Plan Update include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed Land Use Plan includes 445 acres of land in the City designated as Parks, along with 353 acres in the City and 983 acres in the SOI designated as Conservation areas, and another 1,711 acres in the City and 1,753 acres in the SOI designated as Flood Control/Utility Corridors and that may be utilized for trails. In addition, 130 acres are designated as Civic/Regional and includes areas developed with community centers. Also, 483 acres in the City and 2,496 acres in the SOI are designated as Open Space and will remain largely undeveloped. Another 558 acres are designated as Schools and provide joint-use recreational facilities and areas that may be utilized for various recreational uses.

Additional park facilities are proposed to be located along Deer and Cucamonga Canyon Creeks, on Arrow Highway, and at the southeastern corner of the City along the railroad. A new Community Park is proposed along northern Milliken Avenue near Los Osos High School. A new Special Use Facility - Napa Soccer Complex - is proposed at the southeastern portion of the City near Etiwanda Avenue to provide sports fields for use by youth leagues. Neighborhood Parks are proposed in the southwestern portion of the City, with one park along the Cucamonga Canyon Channel south of Base Line Road, and another park along Arrow Highway. Plans to complete Central Park and to expand Etiwanda Creek Park will further expand the City's park system. Upon completion of these parks, a total of 838.7 acres of parks, trails, and special use facilities would be available in the City.

With the development of 7,592 new dwelling units in the City and SOI and an estimated increase in population of 24,300 residents, approximately 121.5 acres of new parkland would be needed to meet the 5 acres per 1,000 residents standard. This parkland need would be provided in compliance with SC 4.15.2 and Policy CS-1.1 in the proposed General Plan Update.

The parks that would be developed in conjunction with future residential developments would meet the demand for recreational facilities by existing and future residents of the City, resulting in a shift in use from existing parks and potentially slower deterioration of existing parks and recreational facilities. Adoption of the proposed 2010 General Plan Update would not lead to the immediate development of the planned parks, trails, and bikeways. Rather, these parks will be implemented as part of new residential developments, as required by the City's Municipal Code (SC 4.15-1 and 4.15-2) or as City funding becomes available.

The development of new parks and recreational facilities would be a beneficial impact in the City by meeting existing and future demand. Parks and recreational facilities developed as part of new residential projects would result in environmental impacts as discussed under the various sections of this PEIR. Individual park projects would also be subject to separate CEQA review in the future, in light of this PEIR. Less than significant adverse impacts are expected; and no mitigation is required.

Impact 4.15b: Future development of parks and recreational facilities in the City would have beneficial impacts in meeting the demands of existing and future residents. Adherence to SCs 4.15-1 and 4.15-2 would ensure that impacts would be less than significant; no mitigation is required.

Park Service Ratios

Threshold 4.15c: **Would the proposed General Plan Update result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service**

ratios, response times, or other performance objectives for park services?

Future development and redevelopment in the City would increase the City's resident population and would generate a demand for additional parks and recreational facilities. As required by the City's Development Code, new residential development will need to provide private and common open space areas and recreational areas and facilities as part of individual projects (SC 4.15-1).

In addition, the City's Local Park Ordinance requires developers of residential projects to dedicate land and/or pay in-lieu fees for the provision of parklands at a standard of 3 to 5 acres of parkland per 1,000 residents (SC 4.15-2). However, Policy CS-1.1 in the Community Services Element of the proposed General Plan Update sets a more stringent standard of 5.0 acres of parkland per 1,000 residents. Future demand for parks and recreational facilities will be met by individual residential developments, in compliance with SC 4.15-2 and Policy CS-1.1 of the proposed General Plan Update.

The proposed General Plan projects a resident population of approximately 203,800 residents at build-out of the City (including the SOI). This will require a total of 1,019.0 acres of parkland, trails and special use facilities, based on the more stringent standard of 5.0 acres per 1,000 persons, as proposed under Policy CS-1.1. When combined with the total area of existing parkland, trails, and special use facilities (642.2 acres), once the planned parks are completed (160.0 acres) and the proposed trails are developed (36.5 acres), the City's total parkland acreage will be approximately 838.7 acres. While 5.0 acres of parkland per 1,000 residents would be provided by new residential development (estimated at 121.5 acres), the City's park and recreation system at buildout will consist of 960.2 acres, which is less than the 1,019.0 acres needed. This means that total parkland acreage will not meet the City's goal of 5.0 acres of parks, trails, and special use facilities per 1,000 persons at buildout due to the existing deficiency. Another 58.8 acres of parkland would be needed to account for the existing deficiency in parkland.

Future residential development would provide 5.0 acres per 1,000 residents to meet new demand and, together with planned parks, would improve existing parkland to population ratios. The 160.0 acres of planned parks, 36.5 acres of proposed trails, and 121.5 acres of recreational uses that would accompany future residential developments are expected to provide 318.0 acres more than the existing parkland acreage. These future parks and recreational facilities would also increase the parkland ratio from the existing 3.58 acres per 1,000 residents to 4.71 acres per 1,000 residents at buildout. Service ratios and performance ratios would be improved over existing conditions and all future development and redevelopment would meet City standards. Improvements to existing service ratios render impacts to be less than significant.

Impact 4.15c: Future development and redevelopment would be accompanied by the development of new parks and recreational facilities pursuant to the City's Local Parkland Ordinance. The existing parkland deficiency will be reduced through development of planned parks and trails and parks as well as recreational facilities that would accompany future residential development. A deficiency will remain at buildout due to existing deficiencies in meeting the 5.0 acres per 1,000 residents standard set by the proposed General Plan. However, service ratios and performance ratios would be improved by the development of planned and future parks, recreational facilities and trails. Impacts are expected to be less than significant.

4.15.7 CUMULATIVE IMPACTS

Future residential development and redevelopment pursuant to the proposed General Plan Update and development of projects in the areas surrounding the City would contribute to the cumulative need for more recreational open space and park facilities in the project area. Typically, parkland requirements are a function of expected demand and are generally related to the number of residential dwelling units created by development projects. Pursuant to Section 66477 of the *California Government Code* (or Quimby Act), the Rancho Cucamonga Development Code requires payment of a fee, the dedication of land for park and recreation facilities, or a combination of both for the provision of parks and recreational facilities for new residential developments. Commercial and industrial developments are not subject to Quimby fees. The adjacent cities of Fontana, Upland and Ontario, as well as the County of San Bernardino, have also adopted parkland dedication ordinances in accordance with the Quimby Act. They also require the provision of on-site recreational facilities for multi-family developments.

Consistent with these regulations, developers of individual projects would pay park fees, dedicate open space lands for park and recreation development, and/or provide on-site recreational facilities to meet the demand for parks and recreational facilities generated by each development. Thus, residential developments in and around the City of Rancho Cucamonga would provide parks and recreational facilities to meet their demands. Since individual development projects would mitigate their incremental impact on parks and recreational facilities, no significant cumulative impacts would result from future development and redevelopment under the proposed General Plan.

4.15.8 MITIGATION MEASURES

With implementation of the relevant goals and policies in the proposed General Plan Update and with compliance with the standard conditions, no significant adverse impacts on parks and recreation are expected. Thus, no mitigation measures are required.

4.15.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Existing Facilities

Less Than Significant.

New and Altered Park Facilities

Less Than Significant.

Park Service Ratios

Less Than Significant.

Cumulative Impacts

Less Than Significant.

4.16 TRANSPORTATION/TRAFFIC

This section analyzes the impacts to local and regional transportation systems associated with the adoption and implementation of the proposed 2010 General Plan Update, and the potential traffic impacts on areawide roadways and intersections as a result of future development and redevelopment pursuant the proposed 2010 General Plan Update. Information in this section is primarily derived from the traffic study prepared by Kunzman Associates, Inc. dated December 10, 2009. The traffic study is included in Appendix H to this PEIR.

The analysis of intersection operations is based on the Intersection Delay Method, as contained in the Highway Capacity Manual (Kunzman 2009). This method calculates vehicle delay based on the capacity of the intersection, with the length of delay defining the Level of Service (LOS) at the intersection.

The LOS is a qualitative and quantitative measure that describes the operational conditions and a motorist's and/or passenger's perception of travel conditions. LOS is designated a letter from A to F, with LOS A representing free flowing traffic conditions. LOS B represents stable flow, but with restrictions and operating speeds beginning to be affected by traffic volume. LOS C represents stable flow, with more restrictions and with speed and maneuverability closely controlled by higher traffic volumes. LOS D represents high density but stable flow, with traffic volumes severely restricting traffic flow. LOS E represents operating conditions at or near capacity level, with low but relatively uniform speeds. LOS F represents forced or breakdown flow, with many stops and low operating speeds.

While LOS on roadway segments may be measured, roadway performance is controlled by the performance of intersections, and more specifically, by intersection performance during peak hours. This is because traffic control at intersections interrupts traffic flow that would otherwise be relatively unimpeded. Thus, LOS typically depends on the quantity of traffic at the intersection. Table 4.16-1 provides the LOS and the corresponding average delay per vehicle for signalized and unsignalized intersections.

**TABLE 4.16-1
LEVELS OF SERVICE**

Level of Service (LOS)	Average Delay Per Vehicle (seconds/vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	* 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and * 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and * 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and * 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and * 50.0
F	> 80.0	> 50.0

Source: TRB 2000.

The City of Rancho Cucamonga has set a standard of LOS D or better (lower) for local intersections, while the San Bernardino County Congestion Management Program (CMP) sets a standard of LOS E for intersections in the County's CMP-designated highway system. The County implements an enhanced transportation management program to ensure that the designated roadways meet this LOS E standard. When the CMP standards differ from the City standards, the CMP guidelines defer to the local agency standards.

4.16.1 RELEVANT POLICIES AND REGULATIONS

Federal

Manual on Uniform Traffic Control Devices

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) was updated in 2009 and is contained in 23 Code of Federal Regulations (CFR), Part 655, Subpart F. The FHWA requires that the updated MUTCD be adopted by individual states as their legal state standard for traffic-control devices within two years of the update. The MUTCD identifies the standards that should be used to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads that are open to public traffic.

Regional

Regional Transportation Plan (RTP)

SCAG prepared the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) to maximize regional mobility and accessibility; to ensure safety and reliability; to preserve the transportation system; to maximize productivity of this system; while protecting the environment and encouraging land use and growth patterns that complement the transportation system. RTP strategies serve to link communities within the region, to meet air quality standards, and to improve the quality of life.

The RTP is a long-range transportation plan (with an approximate 30-year horizon) that projects population and employment growth and defines the vision and overall goals for the regional multi-modal transportation system. It identifies future transportation infrastructure needs and defines planned multi-modal transportation improvements, including freeways, high-occupancy vehicle facilities, bus and rail transit, freight movement, and aviation.

Regional Transportation Improvement Program

The RTIP implements the projects and programs of the RTP. The RTIP lists the specific regional transportation projects needed to meet the circulation needs of the region, along with the funding sources of each project. The 2008 RTIP projects in and near the City of Rancho Cucamonga include:

- widening of ramps and streets at the I-15 freeway's Base Line Road interchange;
- interchange improvements on the I-10 at Grove Avenue;
- a High-Occupancy Vehicle (HOV) lane addition on I-10 from Haven Avenue to Ford Street;
- airport ground access at I-10/Haven and I-10/Archibald;
- a new interchange on the I-15 between Foothill Boulevard and Arrow Highway;
- widening the on-ramps at I-15 and Foothill Boulevard;
- a new I-15/Duncan Canyon Road interchange;
- widening of segments of Milliken Avenue, Holt Boulevard, Arrow Highway, Wilson Street, Carnelian Street, and Grove Avenue;
- the Pacific Electric Inland Empire Trail; and
- Foothill Boulevard/Archibald Avenue intersection improvements.

Work Area Protection and Traffic Control Manual

The Work Area Protection and Traffic Control Manual was developed by the California Joint Utility Traffic Control Committee to provide the basic standards for the safe movement of traffic on highways or streets in accordance with Section 21400 of the *California Vehicle Code*, the Manual on Uniform Traffic Controls for Street and Highways, and applicable State of California Supplements. Guidelines for the provision of traffic controls are provided in the manual for the protection of the public, motorists, cyclists, pedestrians, and workers. Contractors performing work on or adjacent to a roadway must install and maintain traffic-control devices for the safe passage of vehicles, travelers, cyclists, and pedestrians and for the safety of the construction workers.

On-Road Motor Vehicle Mitigation Options

SCAQMD's Rule 2202 requires employers who employ 250 or more employees on a full- or part-time basis to implement various trip-reduction measures to meet an emission reduction target (ERT) based on the number of employees at the site. The ERT can be met by (1) implementing a variety of optional trip-reduction programs and measures for on-site implementation and/or (2) the purchasing credits to offset emissions. Trip-reduction programs and measures may include incentives to use transit or alternative modes of travel, increased vehicle occupancy, off-peak commutes, or reductions in trip lengths through employment center relocation, video-conference centers, and telecommuting centers.

County

Measure I 2010–2040 Strategic Plan

Measure I authorizes a half-cent sales tax in San Bernardino County until March 2040 for use exclusively on transportation improvement and traffic management programs. The *Measure I 2010–2040 Strategic Plan* is the official guide for the allocation and administration of the combination of local transportation sales tax, State and Federal transportation revenues, and private fair-share contributions to regional transportation facilities to fund the Measure I 2010–2040 transportation programs. The Strategic Plan identifies funding categories and allocations and planned transportation improvement projects in the County for freeways, major and local arterials, bus and rail transit, and traffic management systems.

Long-Range Transit Plan

The San Bernardino Associated Governments (SANBAG) has updated its Long-Range Transit Plan (LRTP), which addresses the transit needs of the County for an approximate 25-year horizon. The LRTP prioritizes goals and projects for transit system improvements and expansions. With the passage of SB 375 in 2008, the LRTP has been modified to more closely connect land use and transportation planning strategies. The LRTP addresses countywide travel challenges and creates a system that would increase the role of transit in future travel choices. The Plan seeks to reduce dependence on cars, encourage community revitalization, and encourage more balanced transit-oriented land use development in the County. The LRTP anticipates that premium transit service, such as rapid buses and rail modes, will increase transit use by providing shorter travel times and increased reliability, mobility, and accessibility.

Congestion Management Program

Proposition 111 was passed in June 1990 and provided additional transportation funding through an increase in the State gas tax. The tax was contingent on the development of a

Congestion Management Program (CMP) for each county with an urbanized area having a population of 50,000 persons or more, to be developed and adopted by a designated Congestion Management Agency (CMA). Within San Bernardino County, SANBAG is the designated CMA.

SANBAG's CMP addresses Countywide traffic congestion through an interrelation of transportation, land use, and air quality programs. The CMP sets LOS standards for the County's CMP-designated highway system and implements an enhanced transportation management program to ensure that the designated roadways and intersections meet set standards. The San Bernardino County CMP sets a standard of LOS E for roadway intersections and freeway interchanges in the County's CMP-designated highway system. CMP-designated highways and streets in Rancho Cucamonga are:

- I-15 Freeway,
- SR-210 Freeway,
- Grove Avenue,
- Archibald Avenue,
- Haven Avenue,
- Milliken Avenue,
- Etiwanda Avenue,
- 16th Street/Base Line Road,
- Foothill Boulevard,
- Arrow Highway, and
- 4th Street.

When the CMP was originally adopted in 1992, a number of freeways and highways were operating at LOS F, which automatically made them exceed the LOS E standard. Thus, a secondary standard was established, such that if the 1992 LOS was F, a ten percent degradation is considered a deficiency. In addition, signalized intersections are considered deficient if the overall volume/capacity ratio is equal to or more than 1.0, even if the LOS defined by vehicle delay is below the LOS standard. The following intersections in the City operated at LOS F in 1992:

- Archibald Avenue and Foothill Boulevard,
- Carnelian Street Base Line Road,
- Vineyard Avenue and Foothill Boulevard,
- Grove Avenue and Foothill Boulevard, and
- Foothill Boulevard, between Mountain Avenue and Archibald Avenue.

SANBAG implements the CMP using its Development Mitigation Nexus Study as the basis for identifying fair-share contributions from new development for regional transportation improvements (freeway interchanges, railroad grade separations, and regional arterial highways).

The CMP also outlines the requirements any Traffic Impact Analyses (TIA) needed for proposed development projects. However, cities that adopt a Development Impact Fee (DIF) program consistent with the requirements of Measure I are exempt from the TIA requirements. The City of Rancho Cucamonga's DIF program is consistent with Measure I requirements; it requires the City to fund regional transportation projects through its DIF program. Thus, developments in the City do not need to prepare TIAs per the CMP if they will comply with the City's DIF program.

Local

Title 10 of the Municipal Code

Title 10 of the Rancho Cucamonga Municipal Code specifically addresses vehicles and traffic in the City. This regulation establishes a traffic enforcement division within the SBSB to enforce the street traffic regulations of the City and State vehicle laws. It also outlines the responsibilities of the City Traffic Engineer, advisory traffic committee, SBSB and Fire Departments as they relate to traffic regulations and their enforcement.

Title 10 includes speed limits on various streets in the City, designates one-way streets and alleys, stop-controlled streets; identifies driving rules, pedestrian rights and duties, and restrictions on stopping, standing and parking; establishes permit parking districts and truck routes; and contains other regulations that promote public safety on streets, sidewalks and driveways.

Designated truck routes are limited to major and secondary arterials where trucks may travel, and prevent trucks from utilizing local streets in residential neighborhoods.

Citywide System Fees for Transportation Development

As noted above, the City has adopted a DIF program to fund transportation system improvements in and near the City. Chapter 3.28 of the City's Municipal Code contains the ordinance that spells out the DIF program and determination of fair-share costs for needed improvements. The fees would finance the improvement or construction of roadways and bridges that would mitigate traffic impacts of new development and redevelopment in the City, based on the Nexus Improvement Program.

The developer may be granted a credit against the DIF that would otherwise be charged to the project when (1) a developer constructs a roadway improvement that is larger in size, length, or capacity over that needed by the development and (2) the construction is necessary to ensure efficient and timely construction of the facility. If reimbursement is needed, the amount available in any year shall be at the discretion of the City Engineer.

As part of this program, the City requires new development to conduct a traffic impact analysis to determine the number of trips that would be generated by the development and the improvements needed to serve the development. The traffic analysis serves as the basis for determination of any necessary transportation system improvements that should be constructed as part of the development.

Trip Reduction Ordinance

Chapter 17.10.070 – Trip Reduction of the City's Development Code requires the provision of one shower facility accessible to both men and women by each project that has at least 250,000 square feet of commercial use, 325,000 square feet of industrial use, 125,000 square feet of office use, or 250 rooms in a hotel or motel. Office parks with 1,000 employees or more are required to provide on-site video conference facilities. Ride-sharing opportunities should also be provided through:

1. Distributing ride-share matching forms to all new employees and regularly to continuing employees;
2. Completing surveys of employees to determine interest in ride-sharing;

3. Designating a staff member to assist other employees in finding carpool matches;
4. Advertising and promoting to generate interest and viability for the program;
5. Tailoring work hours to facilitate ride-sharing;
6. Providing preferentially located or priced parking for carpoolers;
7. Leasing vans, at cost, for employees who vanpool;
8. Providing company fleet cars at nominal cost for commuting by carpoolers;
9. Subsidizing subscription bus services, particularly in the early period of formation; and
10. Modifying work hours.

Commercial, office, and industrial facilities must designate ten percent of the total parking area for preferential use by carpools and vanpools. Commercial and office developments with more than 25 parking spaces must also provide motorcycle parking spaces. Bicycle storage spaces must be provided in all multi-family residential projects with more than ten units, and in commercial, office, and industrial developments. Transit improvements (bus shelters, bus pullouts, and bus pads) should be provided if the City Engineer deems it necessary.

Roadway Functional Design Guidelines

The City has established guidelines for the improvement of City streets, which identify the number of lanes, median improvements, access restriction, intersection spacing, curbside parking, and additional right-of-way or easement for each roadway designation. These guidelines are used for the development of individual roadways to their final configurations.

General Design Guidelines

The following three sections call for access and circulation design that provide a safe and efficient system for vehicles and pedestrians: Section 17.08.090 – General Design Guidelines for Residential Districts; Section 17.10.060 – General Design Guidelines for Commercial Districts; and Section 17.30.060 – General Design Guidelines for Industrial Districts. The guidelines address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic, and interconnected public and private sidewalks.

Intersection Line of Sight Design

The City has developed guidelines for the provision of adequate light of sight for roadways and intersections, which identify clear zones for medians and parkways and landscape requirements in areas that may affect line of sight. These guidelines show acceptable and unacceptable designs to protect line of sight and promote driving safety.

Streets, Sidewalks and Public Places

Title 12 – Streets, Sidewalks and Public Places, of the Rancho Cucamonga Municipal Code requires that an encroachment permit be obtained from the City Engineer for the construction of public improvements or the protection of public improvements from construction activities. The

permit requires compliance with the Work Area Protection and Traffic Control Manual and the Manual on Uniform Traffic Controls for Street and Highways.

This Title also requires the improvement of the one-half of the street abutting a parcel as part of the development or improvement of the parcel, along with the dedication of the street right-of-way to the City upon completion of improvements. Street improvements should be made to meet the City's standards for the street.

In addition to required dedication for street purposes, additional dedication for storm drain, sewer, water or other utility purposes may be required in connection with building permits where such dedication is necessary to prevent the flooding of adjacent or nearby property or to permit connection to required utilities.

Parking Regulations

Chapter 17.12 – Parking Regulations of the City's Development Code outlines the City's requirements for the provision, design, and location of parking spaces needed to serve new buildings, new land uses, building expansions or changes in occupancy. The regulations include parking stall sizes, amount of parking for each land use, provision of loading areas, landscaping and design of parking lots, and parking structures. They are intended to ensure that off-street parking is available to serve the specific use, while providing appropriate buffers and transitions to surrounding land uses.

Shared parking is allowed subject to (1) a parking study that shows that substantial conflict will not exist in the main hours or periods of peak demand for both uses and (2) with a written agreement between both parties on the stalls subject to joint use. A reduction in parking provision may be approved if the following are incorporated into a project and that evidence shows employees and/or customers will utilize, on a regular basis, these transportation alternatives: (1) a detailed transportation management plan showing the availability of mass transit and (2) provisions are created for carpooling, staggered work hours, and other measures.

Hiking and Riding Trails Master Plan

The City's Hiking and Riding Trails Master Plan identifies a system of regional and community trails, needed bridges and street undercrossings, and trailheads to access the trail system at various locations throughout the City.

The Regional Multi-Purpose Trails serve as the backbone of the trail system and connects to regional parks, open space preserves, the San Bernardino National Forest, and other regional trails beyond the City. It generally runs along flood-control channels and utility corridors. A Regional Multi-Purpose Trail runs along the east-west route of the old Pacific Electric Railroad as part of the Pacific Electric Inland Empire Trail, which, upon completion, will connect the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto.

Community Trails provide convenient off-road access to community facilities such as parks, schools, and shopping centers. They serve as collectors that link local feeder trails in subdivisions to the regional trail system. Community trails follow streets, utility corridors, and easements and are intended for equestrian and pedestrian use. The North Etiwanda Preserve Trail is an interpretive trail system that provides over three miles of public trail access through the Northern Etiwanda Preserve. The trail connects local points of interest, including historic water delivery system and pumping station remnants, early settlers ruins, a Native American cultural site, riparian wetlands, and a fresh water marsh.

Local Feeder Trails are found within residential subdivisions as private easements. They provide access to the rear of every lot, wherever feasible, to a Community or Regional Multi-Purpose Trail. Local feeder trails can also provide logical riding loops within subdivisions. Neighborhoods in Alta Loma and Etiwanda include a network of equestrian trails that connect to Community and Multi-Use Regional Trails. The Victoria Park Lane Trail and the Terra Vista Greenway provide pedestrian and bike connections between schools and parks through the Victoria Park and Terra Vista neighborhoods.

4.16.2 EXISTING CONDITIONS

Regional transportation access to the City of Rancho Cucamonga is provided by three freeways: Interstates 10, 15 and SR-210. The I-10 freeway is an east-west freeway located just south of the City limits. It has interchanges at major north/south arterials, including Vineyard Avenue, Archibald Avenue, Haven Avenue, Milliken Avenue, and Etiwanda Avenue. The I-15 freeway runs north-south along the eastern edge of the City, with interchanges at Summit Avenue, Base Line Road, Foothill Boulevard, and 4th Street. The SR-210 freeway runs east-west through the northern portion of the City, with interchanges at Carnelian Street, Archibald Avenue, Haven Avenue, Milliken Avenue, and Day Creek Boulevard.

Average traffic volumes on the freeways in 2008 were approximately 151,000 to 198,000 vehicles per day on the I-15 Freeway from 4th Street to Summit Avenue and approximately 153,000 to 173,000 vehicles per day on the SR-210 Freeway from Carnelian Street to the I-15 Freeway (Caltrans 2009).

Major roadways in the City generally run east-west or north south, with east-west roadways carrying more traffic than north-south roadways. This is primarily because the east-west arterials serve as regional connections to neighboring communities.

Principal travel corridors in the City include Foothill Boulevard and 4th Street for east-west travel, and Haven Avenue and Milliken Avenue for north-south travel. These principal travel corridors traverse the City and extend beyond the City limits to connect to freeways and adjacent communities. They are typically six-lane streets and carry the highest traffic volumes, which range from 30,000 to 40,000 daily vehicles, with more than 40,000 vehicles in certain locations.

Secondary travel corridors in the City include Base Line Road and Arrow Highway for east-west travel, and Carnelian Street/Vineyard Avenue, Archibald Avenue, and Day Creek Boulevard for north-south travel. These corridors generally extend across the entire City and, in most cases, connect with freeways and extend into other communities. They are typically four-lane streets, with some six-lane segments, and they carry traffic volumes ranging from 20,000 to 30,000 vehicles per day.

A system of tertiary travel corridors supports and provides access to the primary and secondary corridors in the City. These include Wilson Avenue, Church Street, Banyan Street, 19th Street, and 6th Street in the east-west directions, and Hermosa Avenue, Rochester Avenue, Etiwanda Avenue, and East Avenue in the north-south direction. These streets carry local traffic and are often four-lane streets, with some two-lane segments. They typically carry from 10,000 to 15,000 vehicles per day.

Existing average daily traffic volumes on major roadways in the City are shown in Exhibit 4.16-1, Existing Traffic Volumes. These volumes were derived from peak hour traffic counts made in 2007, 2008, and 2009. The LOS at major intersections and freeway interchanges in the City are listed in Table 4.16-2, Existing Intersection LOS.

**TABLE 4.16-2
EXISTING INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
Grove Avenue				
Foothill Boulevard	19.2	B	21.0	C
Arrow Highway	10.3	B	10.7	B
Carnelian Street				
SR-210 westbound	17.3	B	16.0	B
SR-210 eastbound	11.4	B	18.9	B
19th Street	29.6	C	29.4	C
Base Line Road	28.2	C	29.7	C
Vineyard Avenue				
Foothill Boulevard	26.8	C	36.2	D
Arrow Highway	27.1	C	26.3	C
Archibald Avenue				
SR-210 westbound	18.0	B	15.2	B
SR-210 eastbound	12.4	B	15.2	B
19th Street	26.7	C	27.7	C
Base Line Road	25.9	C	32.1	C
Foothill Boulevard	25.8	C	31.1	C
Arrow Highway	28.6	C	27.7	C
4th Street	28.3	C	31.5	C
Haven Avenue				
SR-210 westbound	15.1	B	16.3	B
SR-210 eastbound	17.3	B	15.3	B
Base Line Road	28.7	C	34.3	C
Foothill Boulevard	30.2	C	37.3	D
Arrow Highway	26.0	C	29.1	C
Milliken Avenue				
SR-210 westbound	17.5	B	13.4	B
SR-210 eastbound	14.9	B	15.7	B
Base Line Road	27.6	C	31.0	C
Foothill Boulevard	28.9	C	35.1	D
Arrow Highway	25.9	C	36.4	D
4th Street	31.9	C	43.3	D
Rochester Avenue				
Arrow Highway	23.7	C	31.4	C
Day Creek Boulevard				
SR-210 westbound	17.4	B	14.8	B
SR-210 eastbound	14.2	B	15.9	B
Etiwanda Avenue				
Base Line Road	26.3	C	25.4	C
Foothill Boulevard	29.0	C	34.0	C
Arrow Highway	34.5	C	99.9	F
East Avenue				
Base Line Road	63.4	E	46.5	D
I-15 southbound				
Beech Avenue	16.1	B	12.0	B
Base Line Road	19.1	B	13.7	B
Foothill Boulevard	9.1	A	7.0	A

**TABLE 4.16-2 (Continued)
EXISTING INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
I-15 northbound				
Beech Avenue	12.9	B	15.6	B
Base Line Road	13.4	B	18.1	B
Foothill Boulevard	11.4	B	13.0	B
Americana Way				
Base Line Road	21.4	C	22.4	C
All intersections are signalized. Bold text identifies Delay and LOS that exceed standards.				
Source: Kunzman 2009				

As shown, all intersections currently operate at LOS D or better, except for two:

- Etiwanda Avenue at Arrow Highway (LOS E in AM peak)
- East Avenue and Base Line Road (LOS F in PM peak)

Bus Transit

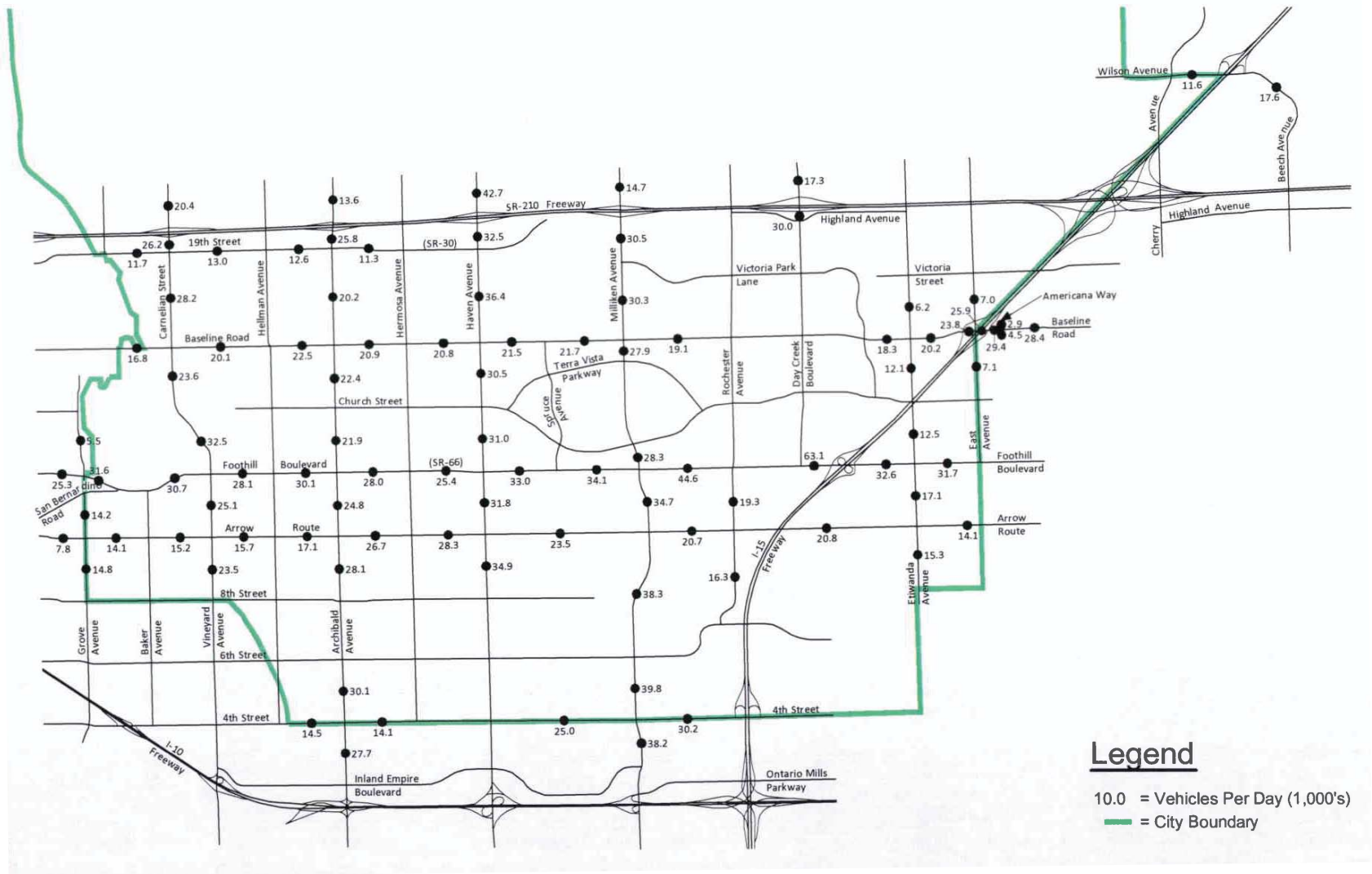
Bus transit services are available in the City through fixed-route and demand-response services provided by Omnitrans. There are seven bus routes that run through the City, connecting to the neighboring cities of Fontana, Upland, Ontario, Montclair, and Chino. The routes serve major destinations in the region, such as Chaffey College, the Rancho Cucamonga Metrolink Station, the Fontana Metrolink Station, the Ontario Mills Mall, the LA/Ontario Airport, the Ontario Civic Center, the Pomona TransCenter, the Montclair TransCenter, the Chino Civic Center and Transit Center, and the Rancho Cucamonga Civic Center.

Within Rancho Cucamonga, the bus routes run on major roadways, including Haven Avenue, Day Creek Boulevard, Milliken Avenue, Carnelian Street/Vineyard Avenue, Base Line Road, Foothill Boulevard, and Arrow Highway, and segments of Banyan Street, Victoria Park Lane, and 4th Street.

Omnitrans' demand-response service (Access) is a curb-to-curb van service for people unable to independently use the fixed-route service. Reservations can be made for pick-up and drop-off within a three-quarter mile range of the existing Omnitrans fixed bus routes and during the same service hours. This service complies with the requirements of the Americans with Disabilities Act (ADA).

Commuter and Freight Trains

Metrolink, operated by the Southern California Regional Rail Authority, is a regional rail system that provides commuter rail transportation for the region. The Rancho Cucamonga Metrolink Station is located at 11208 Azusa Court (west of Milliken Avenue), where passenger trains run 19 round trips daily from downtown Los Angeles to downtown San Bernardino on weekdays, 10 round trips on Saturdays, and 7 round trips on Sundays (SCRRA 2010).



Legend

- 10.0 = Vehicles Per Day (1,000's)
- = City Boundary

Existing Traffic Volumes

Rancho Cucamonga General Plan Update



Source: Kunzman Associates, Inc.

Exhibit 4.16-1



The Metrolink railroad runs east-west through the southern section of the City, with grade separations at Milliken and Haven Avenues. This same rail line is occasionally used by freight trains when the Union Pacific Railroad line (running east-west south of the I-10 freeway) is closed or restricted for limited periods. Local freight train traffic in the City includes switches¹ on various spur lines² serving the industrial areas at the southern section of the City, including:

- A spur line extending south from the Metrolink tracks between Archibald Avenue and Hermosa Avenue; sidings³ extending south from the Metrolink tracks just east of Haven Avenue.
- A wye⁴ and spur tracks extending north from the Metrolink tracks just west of Milliken Avenue.
- Spurs extending north and south from the Metrolink tracks between Milliken Avenue and Rochester Avenue.
- Spur tracks extending north from the Metrolink tracks between I-15 and Etiwanda Avenue.

Trails and Bikeways

The Pacific Electric Trail is a 21-mile long trail that follows the former Southern Pacific railroad corridor and was originally built for the Pacific Electric Railway. This trail runs east-west through the City and will connect to the cities of Claremont, Montclair, Upland, Rancho Cucamonga, Fontana, and Rialto when fully completed. The North Etiwanda Preserve Trail is an interpretive trail system that provides over three miles of public trail access through the North Etiwanda Preserve. The North Etiwanda Preserve is a conservation area that protects sensitive wildlife species. This trail allows hikers to explore the alluvial fan sage scrub habitat within designated trails and to view interpretive signs providing information about the history of the area and biological benefits of the Preserve.

Bike paths, lanes, and routes are found throughout the City, with the main east-west route along the Pacific Electric Trail. The north-south route runs along Deer Creek from the SR-210 Freeway to the southern City limit. Other established or planned bike paths run along the Cucamonga Channel and Demens Creek in the western part of the City, on Wilson Avenue and Etiwanda Avenue in the northeast, and within the Terra Vista community. Bike lanes are present and/or will be provided on most principal and secondary travel corridors. Bike routes (signs) are planned in older areas where bike lanes are not feasible. Exhibit 4.16-2, Bicycle Plan, shows the bike paths, lanes and routes in the City.

Airport

There is no airport or airstrip in the City. However, the LA/Ontario International Airport is located just south of the City. This airport is a medium-hub, full-service airport with commercial jet service to major U.S. cities and international destinations. It is located approximately 1.2 miles from City's southern boundary. In 2006, 7 million passengers used the airport and over 600,000 tons of air freight were shipped through this airport (LAWA 2010).

¹ Points where the main track diverges into two or three tracks

² Tracks that extend from the main line into a business park, warehouse or factory

³ Low-speed track segments used for marshaling, stabling, storing, loading and unloading

⁴ A triangular arrangement of railway tracks with a switch (point) at each corner

Aircraft flight patterns from the airport do not fall within Rancho Cucamonga boundaries, and noise from aircraft is not a significant concern in the City. A portion of the Airport Influence Area, which includes the area surrounding an airport that can be affected by airport operations, overlaps the City's southern boundary, generally along 8th Street to the I-15 freeway. This issue is discussed further in Sections 4.8, Hazards and Hazardous Materials, and 4.12, Noise, of this PEIR.

4.16.3 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are derived from Appendix G of the State CEQA Guidelines. The project would result in a significant adverse impact related to transportation and traffic if it would:

- Threshold 4.16a:** Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Threshold 4.16b:** Conflict with an applicable congestion management level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways;
- Threshold 4.16c:** Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Threshold 4.16d:** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Threshold 4.16e:** Result in inadequate emergency access;
- Threshold 4.16f:** Conflict with adopted policies, plans, or programs regarding public transit bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

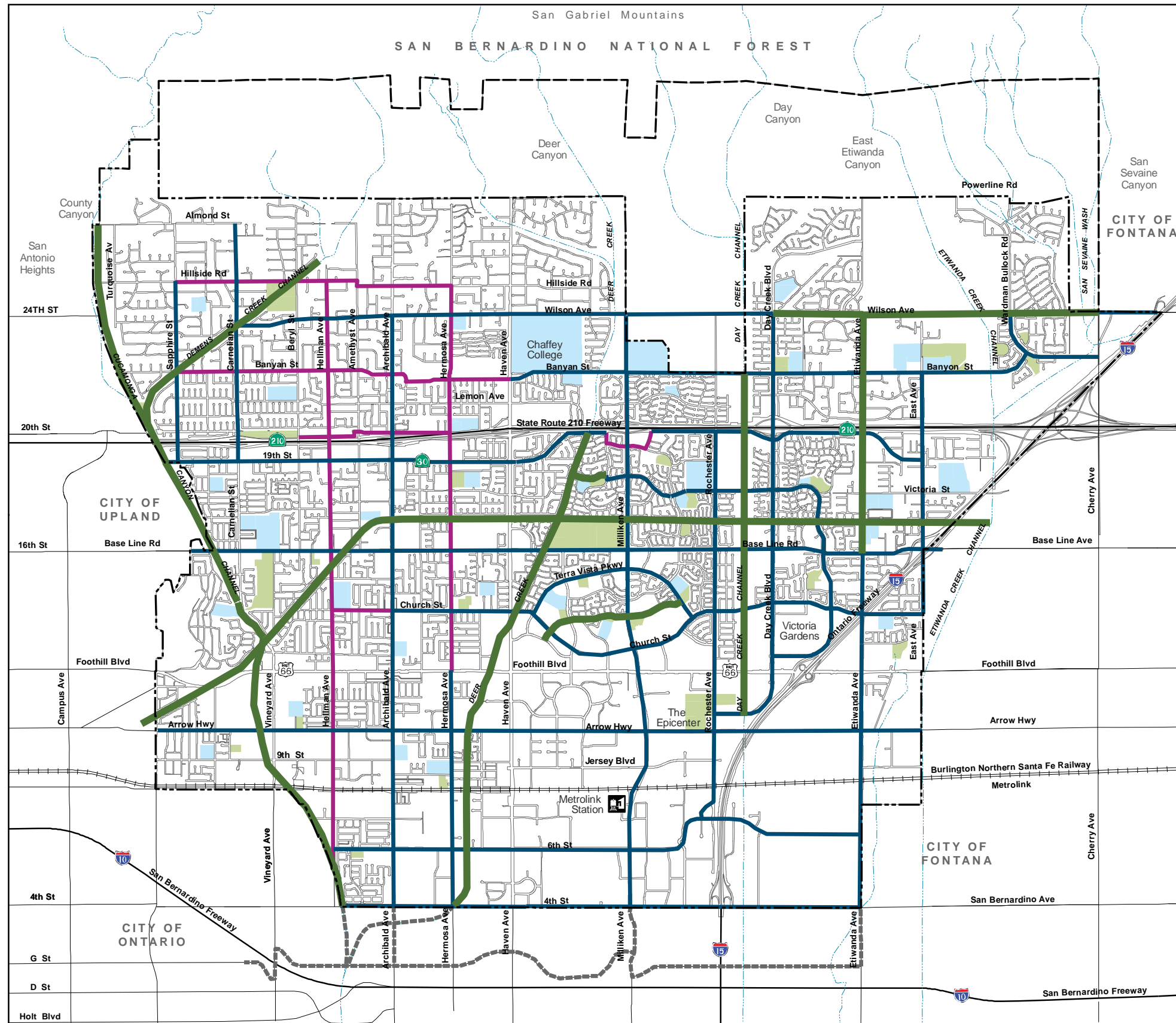
4.16.4 GENERAL PLAN GOALS AND POLICIES

A number of goals and policies in the proposed 2010 General Plan Update address the development of an efficient and comprehensive transportation network in the City that meets the needs to the existing and future land uses and supports the City vision for enhance mobility and expanded transportation choices. Implementation of these goals and policies and their corresponding implementation actions would improve the transportation system in the City and prevent adverse traffic impacts. These include:

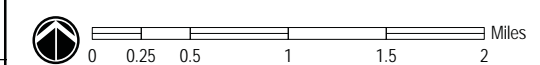
Policy LU-8.3: Require adequate access for emergency vehicles and evacuations.

Implementation Action: *Continue to coordinate the review of development proposals within hillside areas with emergency personnel.*

GOAL CM-1: *Provide an integrated and balanced multi-modal transportation network of complete streets to meet the needs of all users and transportation modes.*



- Bicycle Plan**
- Class I (Bike Path)
 - Class II (Bike Lane)
 - Class III (Bike Street)
 - Bike Routes Outside Rancho Cucamonga
- Parks and Schools**
- Schools
 - Parks
- Rancho Cucamonga City Boundary
- Sphere of Influence
- Waterways



D:/Projects/Hogle/J007/Graphics/ex_bikeplan.ai

Bicycle Plan

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-2



R:/Projects/Hogle/J007/Graphics/EIR/Ex4.16-2_Bikeplan.pdf

Policy CM-1.1: Provide a safe and efficient street system in the City to support mobility goals, all transportation modes, and the goals of the Managing Land Use, Community Design, and Historic Resources Chapter.

Implementation Action: *Add the intersection improvements listed below to the Capital Improvement Program (CIP) or appropriate equivalents identified and approved by the City Engineer in the future that would offset the identified impacts; implement the improvements as funding becomes available. Prepare a report on the need for the improvements and their relationship to the impacts caused by new development in Rancho Cucamonga.*

- *Work with Caltrans and SANBAG to implement a new freeway interchange at 1-15 and Arrow Highway.*
- *Complete Wilson Avenue between Milliken Avenue and Day Creek Boulevard.*
- *Complete Rochester Avenue between Banyan Street and Wilson Avenue.*
- *Pursue Federal funds for a grade separation of the SPRR at Etiwanda Avenue.*
- *Complete storm drain and widening of Hellman Avenue from Foothill Boulevard to Cucamonga Creek.*
- *Complete Wilson Avenue from East Avenue to Wardman Bullock*
- *Improve the Base Line Road at I-15 Freeway Interchange*
- *Complete Youngs Canyon from Cherry Avenue to Banyan Street*

Policy CM-1.2: Provide an integrated network of roadways that provides for convenient automobile, transit, bicycle, and pedestrian circulation movement around the City.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information. Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-1.3: Complete the circulation system by constructing new roadway facilities and freeway interchanges pursuant to the Circulation Plan (Figure CM-2).

Implementation Action: *Identify in the CIP future projects and new roadways based on available funding.*

Policy CM-1.4: Provide access for seniors and those with physical disabilities in all elements of the transportation system.

Implementation Action: *Continue to operate the Silver Fox Express. Consult with Omnitrans regarding providing ACCESS transportation services. Require that all new future transportation facilities have appropriate and adequate access for seniors and people with physical disabilities.*

Policy CM-1.5: Implement street design standards. Modified standards may be applied where appropriate on arterial corridors relating to transit, bicycle facilities, sidewalks, and on-street parking to be context sensitive to adjacent land uses and districts, and to all roadway users, including transit, bicycles, and pedestrians.

Implementation Action: *Integrate into the CIP process the planning of modified standards for Foothill Boulevard to accommodate BRT and for other arterials as appropriate to reflect the bikeway plan and pedestrian improvements necessary to support mixed-use districts.*

GOAL CM-2: *Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.*

Policy CM-2.1: Facilitate bicycling and walking citywide.

Implementation Action: *Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.*

Policy CM-2.2: Encourage all feasible measures to reduce total vehicle miles traveled by automobiles, including enhanced transit access and land use approaches that provide compact and focused development along major transit corridors.

Implementation Action: *Review and modify the Development Code and Specific Plans to ensure that those areas identified in Table LU-2 of Chapter 2: Managing Land Use, Community Design, and Historic Resources allow for the type and densities/intensities of development as outlined. Assess the streetscape and landscape amenities along the Haven Avenue corridor to determine where enhancements can be programmed into new development or redevelopment in the future. Require new development projects to coordinate with transit authorities as part of a pre-application process to determine how and where transportation facilities can be incorporated into a project. Implement the Bicycle Master Plan included in the Community Mobility Chapter. Require that pedestrian facilities and connections be provided as part of all development projects, with an emphasis on connections within Mixed Use districts. Implement all bicycling and walking policies and Mobility Element components. Preparation and distribute bike route*

maps and bike facilities information. Publish and make readily available pedestrian route maps and pedestrian facilities information.

Policy CM-2.3: Support the use of hybrid, electric, and low/zero emission vehicles.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.4: Replace City vehicles with energy-efficient and alternative fuel source models when replacing vehicles or adding to the City's fleet.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities.

Policy CM-2.5: Establish priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles.

Implementation Action: Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.6: Accommodate charging and fueling stations for alternative fuel vehicles, and put forth strong efforts to have charging facilities provided at employment centers.

Implementation Action: Continue to maintain the Green Team Sustainability Action Matrix that identifies current and proposed efforts that procure vehicles that includes providing gas-efficient vehicles. Amend the Development Code as appropriate to accommodate alternative fuel service stations and charging facilities. Consider updating the Development Code (§17.12) to include regulations on establishing priority parking locations for hybrid, electric, and low/zero emission, and alternative fuel vehicles for large office and commercial developments.

Policy CM-2.7: Require new developments of more than 100 employees (per building or per tenant/company) to develop Transportation Demand Management programs to minimize automobile trips and to encourage use of transit, ridesharing, bicycling, and walking.

Implementation Action: Consider expanding §17.10.070 Trip Reduction of the Development Code to include additional Transportation Demand Management programs.

Policy CM-2.8: Support the installation of high-speed communications infrastructure to facilitate the ability of residents to work at home.

Implementation Action: Continue to implement Title 7 Telecommunications Regulations of the Municipal Code.

GOAL CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.

Policy CM-3.1: Consult with regional transit operators to maintain and improve the coverage and frequency of transit service in the City.

Implementation Action: *Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.*

Policy CM-3.2: Support Omnitrans' expansion of Bus Rapid Transit (BRT) into Rancho Cucamonga, along Foothill Boulevard, with stops at all major north-south streets, and with direct routing via Victoria Gardens.

Implementation Action: *Proactively engage with Omnitrans to identify the timing of BRT service, preferred BRT stops within the City, and necessary local infrastructure improvements needed to accommodate BRT service. Develop a time frame and development requirements so that development projects at affected locations can incorporate needed improvements along planned BRT routes. Work with Omnitrans to develop station designs, lighting, and station amenities that are compatible with Rancho Cucamonga's design character.*

Policy CM-3.3: Provide local transit circulator service in the City to serve local neighborhoods, Victoria Gardens, the Metrolink Station, the Civic Center, Central Park, and key destinations.

Implementation Action: *Study the feasibility of establishing a local transit circulator to connect businesses, adjacent development, and activity centers in the City. Explore options for alternative funding from sources other than the General Fund, such as having merchants sponsor the shuttle. These buses should operate on fixed routes (with possibly some minimal real-time deviation) and on regular and convenient schedules. The service could be based on smaller (20-35 seat) buses. This action to include the following:*

Conduct a Transit Planning Study

Study to determine the best approach to initiating local transit service, to develop a Short-Range (Five Year) Transit Plan for operating such a service, and to determine funding sources.

Explore the Feasibility of Extending Local Transit Service

Explore the possibility of extending to adjacent jurisdictions in cooperation with such jurisdictions who could also participate in funding, if beneficial to the City.

Work with Regional Transit Operators (Omnitrans)

Develop the optimum coordination and integration of bus transit services between the local City circulator system and the regional service.

Policy CM-3.4: Consult with Omnitrans to establish and maintain transit hubs at Victoria Gardens, Chaffey College, the Metrolink Station, and other locations as appropriate to facilitate use of transit and transfers between transit services.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel.

Policy CM-3.5: Consider and evaluate the relocation of Metrolink Station to Haven Avenue to provide improved connections to transit and to support planned transit-oriented land uses along Haven Avenue.

Implementation Action: Work with Metrolink and SCRRA to study the feasibility of moving the Metrolink Station from its current location to Haven Avenue. Explore options for alternative funding from sources other than the General Fund, such as grants, and specifically grants that promote transit-oriented development.

Policy CM-3.6: In addition to requiring private development to provide transit amenities, consult with regional transit operators to provide attractive and convenient bus stops, including shade/weather protection, seats, transit information, and bus shelters as appropriate.

Implementation Action: Consult and work with regional transit operators to add service coverage and frequency of service in Rancho Cucamonga per Figure CM-4 of the Community Mobility Chapter. Provide input to and monitor results of the Omnitrans Short Range Transit Plan to: (1) ensure that the Plan is responsive to the City's needs, and (2) be in a position to incorporate appropriate conditions of approval on development projects that could benefit from transit access. Coordinate specific location of local bus routes and service loops to provide optimum transit service to the City's residents and businesses. Focus particularly on areas in which the mix and intensities of uses are most in need of a transit option and most likely to support transit operations. Actively promote the use of transit in the City through the publication of transit route maps, schedules and other information, the development and implementation of marketing programs, and the provision of coordinated transit service and bicycle and pedestrian facilities information. Provide locations in the City where residents can purchase transit

passes. Provide park-and-ride lots at rail stations and transit centers and near freeway interchanges to encourage ridesharing and transit use. Support the Gold Line Extension from Montclair to LA/Ontario Airport, with a preferred alignment along the Metrolink right-of-way and the Cucamonga Channel. Also, develop a program, with identified funding sources, for providing amenities at bus stops in the City.

Policy CM-3.7: Continue to develop and maintain a citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets to provide connections between neighborhoods, schools, parks, civic center/facilities, recreational facilities, and major commercial centers.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.8: Continue to encourage the provision of bicycle facilities, such as bicycle lockers and secure bike parking, throughout the City.

Implementation Action: *Identify existing locations where bicycle lockers and secure bicycle parking could be provided at key locations throughout the City, and develop a funding and implementation plan. Encourage/require the provision of bicycle lockers and secure bike parking for major development projects, as defined in the Development Code. Modify the Development Code to require provision of bicycle parking spaces, bicycle lockers, and, as appropriate, showers for bicycle riders at new buildings providing significant employment, at transit stations, in the commercial districts, and at recreational destinations in the City.*

Policy CM-3.9: Identify and implement a dedicated funding source for implementation and completion of the bicycle network as identified in the Bicycle Plan.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those*

arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.10: *Continue to complete the installation of sidewalks and require new development to provide sidewalks.*

Implementation Action: *Use the CIP to identify a schedule for installing new and replacement sidewalks throughout the City, placing priority on installing missing sidewalks near schools and activity centers, and replacing sidewalks that have been identified as hazardous to public safety.*

Policy CM-3.11: *Continue to require pedestrian amenities on sidewalks on major streets that are key pedestrian routes, including the provision of benches, shade trees, and trash cans.*

Implementation Action: *Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.*

Policy CM-3.12: *Continue to require that the siting and architectural design of new development promotes safety, pedestrian-friendly design, and access to transit facilities.*

Implementation Action: *Develop standards to be applied to development projects along transit corridors that require transit and pedestrian accessibility.*

Policy CM-3.13: *Establish a number of bike hubs in the City (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit nodes and at commercial nodes.*

Implementation Action: *Conduct a study to determine the best locations for bike hubs in the City, and develop a plan, wayfinding program, and implementation process for providing bike hubs that provide secure bicycle lockers, bike racks, and connections to transit at key locations in the City.*

Policy CM-3.14: *Enhance pedestrian and bicycle access to local and regional transit, including facilitating connections to transit.*

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized*

categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.

Policy CM-3.15: Coordinate the provision of the non-motorized networks (bicycle and pedestrian) with adjacent jurisdictions to maximize sub-regional connectivity.

Implementation Action: *Implement the Bicycle Plan pursuant to Figure CM-6. Update the City's Bicycle Circulation Plan in a format suitable for obtaining public funding. Develop the planning, implementation, and design details of the bicycle facility and amenity elements of the Community Mobility Chapter, including the setting of implementation priorities and the identification of both capital and operating funding sources. Implementation should focus on adding a north-south trail along either Deer Creek or Cucamonga Creek as a first priority. Update the City's Trails Implementation Plan to maintain consistency with the General Plan. Review City ordinances to ensure that an adequate mechanism exists to manage the use of trails only by authorized categories of users. Implementation of the Bicycle Plan may require traffic signalization at the crossing of bike paths with arterial roadways to facilitate the safe crossing of those arterials by bicyclists and pedestrians. Signals should be convenient to bicyclists with accessible push-buttons to activate the signal. Provide traffic control push button devices at convenient locations for bicyclists at signalized intersections on the identified Bicycle Network.*

Policy CM-3.16: Establish fixed route local circulator bus service connecting major activity centers.

Implementation Action: *Explore development of a fixed route local circulator bus system, station location, and funding mechanisms.*

GOAL CM-4: Maximize the operational efficiency of the street system.

Policy CM-4.1: Continue to implement traffic management and traffic signal operation measures along the arterial roadway to minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.*

Policy CM-4.2: Continue to design and operate arterials and intersections for the safe operation of all modes of transportation, including transit, bicyclists, and pedestrians.

Implementation Action: *Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with*

the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.3: Continue to implement Intelligent Transportation System (ITS) measures and advanced traffic management technologies where appropriate.

Implementation Action: Complete intersection capacity improvements, coordinate traffic signals utilizing Intelligent Transportation Systems (ITS), and improve striping and signage. Striping shall maximize room for bike lanes where feasible and consistent with the Bicycle Plan. Modernize traffic signal equipment as necessary, and continue to update traffic signal timing and synchronization plans to optimize traffic flow along the key arterial corridors, taking into account the needs of transit, bicyclists, and pedestrians as well. Invest in the communications infrastructure necessary to operate a Citywide traffic signal control system.

Policy CM-4.4: Maintain the City's transportation infrastructure in good condition; develop and maintain adequate funding sources for its ongoing maintenance and upkeep.

Implementation Action: Continue to implement and follow the schedule for resurfacing streets and streets improvements per the CIP.

GOAL CM-5: Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.

Policy CM-5.1: Continue to require that new development participates in the cost of transportation mitigation and improvements necessitated by new development, including non-automobile solutions.

Implementation Action: Require payment of Traffic Impact Fees as approved by the City Council, used to finance specific improvements made necessary by new development. The relationship between the fees, the cost of the improvements, and new development has been established in fee analyses approved by the City Council. These fees shall be reviewed from time to time and adjusted as needed.

Policy CM-5.2: Require evaluation of potential traffic and transportation impacts associated with new development prior to project approval, and require adequate mitigation measures, including non-automobile solutions prior to, or concurrent with, project development.

Implementation Action: Require applicants to prepare traffic and transportation impact assessments consistent with adopted City guidelines and standards. Continue to require sidewalks, pedestrian paths, and connections to be provided as part of new development projects to improve and enhance access between neighborhoods, and from neighborhoods to schools, parks, trails, commercial centers, and other activity centers.

Policy CM-5.3: Require that new and substantially renovated office, retail, industrial, and multi-unit developments implement transit amenities, including bus turnouts, transit shelters, and other streetscape elements, as appropriate.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-5.4: Require that new and substantially renovated office, retail, industrial, institutional and multi-unit developments include bicycle and pedestrian amenities on site and/or in the vicinity of the development to facilitate bicycling and walking, including on-site bike paths where appropriate, secure off-street bicycle parking, sidewalk improvements, and benches. The City will encourage such developments to provide bicycle facilities such as showers and changing rooms.

Implementation Action: Identify key pedestrian travel corridors citywide, and prepare a Citywide Pedestrian Circulation Study to determine pedestrian amenity needs, capital and operating funding sources, and a phased implementation program. Develop a program for gradually installing public amenities such as streetlights, benches, trash containers, art, drinking fountains, landscaping, etc. that will enhance the pedestrian environment and encourage increased use of transit. Use both the CIP process and other funding sources, including a program whereby businesses or residents may sponsor street furniture and/or landscaped areas.

Policy CM-5.5: Allow shared parking between land uses where feasible and appropriate, and encourage “park once” strategies to facilitate the efficient use of parking resources.

Implementation Action: Continue to monitor and look for opportunities to improve parking throughout the City. Incorporate Park-Once strategies on large development projects. Encourage shared use parking in those areas where a mix of uses with different peak usage are located adjacent or near each other. Review and update parking standards to ensure that they are responsive to trip generation patterns and parking usage throughout the City.

Policy CM-5.6: Evaluate proposed parking and circulation plans for new school sites, and coordinate with school districts to provide for safe pedestrian, bicycle, and vehicular access to and around schools.

Implementation Action: Regularly consult with school districts to identify any problems with circulation around school sites. Work with the districts to establish school-specific circulation plans that address traffic management, parking, needed infrastructure improvements (and sidewalks in particular), and programs that can reduce the number of children getting to school by car.

GOAL CM-6: Coordinate with other jurisdictions on regional transportation issues.

Policy CM-6.1: Actively pursue Federal, State, and regional funds for local and regional roadway improvements.

Implementation Action: Assign dedicated staff to research and pursue available funding sources.

Policy CM-6.2: Support appropriate regional plans for high-occupancy vehicle lanes, Bus Rapid Transit and express bus, rail transit, and high-speed rail, provided it does not negatively impact the City.

Implementation Action: *Consult with Omnitrans and/or Caltrans when coordinating with regional transportation plans that directly impact the City.*

Policy CM-6.3: Maintain consistency with the South Coast Air Quality Management District air quality mandates, SANBAG's Congestion Management and Nexus Programs, and SCAG's Regional Mobility Plan requirements.

Implementation Action: *Continue to review and participate in the implementation and update of regional air quality and transportation plans.*

Policy CM-6.4: Require the provision of appropriate mitigation of traffic impacts in surrounding communities resulting from development in Rancho Cucamonga. Work with surrounding communities to ensure that traffic impacts in Rancho Cucamonga resulting from development outside the City are adequately mitigated.

Implementation Action: *Continue to consult with surrounding jurisdictions in the coordination of traffic projects and proposed development.*

Policy CM-6.5: Consult with Caltrans, SCAG, the South Coast Air Quality Management District, SANBAG, Omnitrans, San Bernardino County, and the cities of Upland, Fontana, Ontario, and Montclair to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.

Implementation Action: *Continue to consult with regional agencies to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.*

GOAL CM-7: Maintain an efficient and safe network of goods and freight movement that supports the needs of the business community.

Policy CM-7.1: Continue to maintain a truck circulation system that defines truck routes, directs the movement of trucks safely along major roadways, and minimizes truck travel on local and collector streets.

Implementation Action: *Continue to enforce the truck route ordinance. Periodically review the ordinance to ensure that it adequately manages truck traffic throughout the City.*

4.16.5 STANDARD CONDITIONS OF APPROVAL

Existing regulations address the provision of adequate transportation systems to meet the circulation and transportation needs of the region. Compliance by existing and future development and redevelopment with these standard conditions would reduce traffic congestion and promote traffic safety. These include those Standard Conditions of Approval (SCs) listed below.

SC 4.16-1 Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection

improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.

- SC 4.16-2** All future work within streets, sidewalks, and public places in the City shall comply with Title 12 of the Municipal Code, which requires an encroachment permit from the City and compliance with set standards that include those in the Work Area Protection and Traffic Control Manual. Application for the permit shall be made as part of the City's plan check process and prior to any work on public areas or rights-of-way.
- SC 4.16-3** Improvements to the City's transportation network are planned as part of the SCAG's Regional Transportation Improvement Plan (RTIP); the SANBAG's Measure I 2010–2040 Strategic Plan; and the City's Nexus Improvement/development impact fee (DIF) Program. Future development and redevelopment shall pay applicable DIF during the plan check process. The DIF, along with the use of State and Federal funds, is expected to implement various freeway, highway, roadway projects in and near Rancho Cucamonga.
- SC 4.16-4** All future roadway improvements shall comply with the City's Roadway Functional Design Guidelines, which include the number of lanes, median improvements, access restrictions, intersection spacing, curbside parking, required rights-of-way, and easement access based on the roadway designation. Closely related to roadway design would be the provision of adequate line of sight, in accordance with the City's Intersection Line of Sight design guidelines and General Design Guidelines that address points of access, reduction of conflicts between vehicular and pedestrian traffic, minimal impacts on adjacent properties, adequate maneuvering areas, separation of vehicular and pedestrian traffic and interconnected public and private sidewalks. Roadway improvement plans shall show compliance with these standards, as reviewed by the City's Building and Safety Department during the plan check process.
- SC 4.16-5** The City shall continue to implement Title 10 of the Municipal Code, which establishes various responsibilities and programs to regulate vehicles and traffic in the City. The enforcement of traffic regulations would promote safety on streets, sidewalks and driveways through speed limits, parking permits, truck routes, pedestrian rights and duties, intersection controls, and other restrictions.
- SC 4.16-6** Future development and redevelopment shall comply with the City's Trip Reduction Ordinance, which calls for the provision of amenities or programs to encourage the use of alternative modes of travel by employees; patrons; and visitors of commercial, industrial, office, and mixed use developments. These include shower facilities, preferred parking, bicycle storage, video conference facilities, transit improvements, and other measures to reduce vehicle trips in the City. These facilities shall be shown in the site improvement and building plans submitted to the City during the permit process.
- SC 4.16-7** Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register

with the SCAQMD to implement an emission reduction program, in accordance with this Rule.

SC 4.16-8 The City shall develop trails in accordance with the Hiking and Riding Trails Master Plan to provide opportunities for hiking, riding, and bicycle use throughout the City. Concurrently, the City shall also implement its Bicycle Plan for the development of bikeways, bike lanes, and bike routes throughout the City. Future development and redevelopment on sites where hiking, riding, and bicycle trails are planned shall provide the necessary improvements and/or land dedication to facilitate the implementation of the Hiking and Riding Trails Master Plan.

SC 4.16-9 Future development and redevelopment shall comply with SANBAG's Long Range Transit Plan, which calls for improvements to the transit systems that serve the County, including the provision of premium transit service, bus transit improvements and rail system improvements. Accommodations for bus bays, bus stops, transit centers, and other facilities shall be provided by future development and redevelopment in accordance with the Long Range Transit Plan, and in consultation with SANBAG. Implementation of this plan is expected to encourage greater transit use in the County.

4.16.6 ENVIRONMENTAL IMPACTS

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would generate new vehicle trips that could add to existing traffic volumes on roadways, intersections and freeways in and near the City.

Circulation System

Threshold 4.16a: **Would the proposed 2010 General Plan Update conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The traffic study by Kunzman Associates analyzes the traffic impacts of buildout of the proposed 2010 General Plan Update. Because SANBAG's traffic modeling forecasts and projected long-term transportation needs planning is based upon traffic growth projections contained in Rancho Cucamonga's 2001 General Plan, the study compared the trip generation of all land uses at buildout of the current 2001 General Plan with the proposed 2010 General Plan Update to determine compliance with SANBAG documents. The analysis showed that the proposed 2010 General Plan Update would generate fewer vehicle trips daily and during the AM and PM peak hours than the current land use plan. This is due to a decrease in reduced overall employment and the vehicle trips associated therewith.

Projections of traffic volumes in 2030 were based on the linear growth of traffic from 2009 (existing conditions) to 2030 (proposed General Plan buildout), using the incremental growth assumptions from the I-10 High-Occupancy Vehicle (HOV) Traffic Model (Year 2003) and the Year 2030 average daily traffic forecasts. The existing traffic count data were used to determine initial turning movement proportions according to the forecasted traffic volumes on each approach. Table 4.16-3 shows the projected delay and LOS at major intersections in the City.

**TABLE 4.16-3
YEAR 2030 INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
Grove Avenue				
Foothill Boulevard	22.1	C	22.2	C
Arrow Highway	10.7	B	11.8	B
Carnelian Street				
SR-210 westbound	18.7	B	16.1	B
SR-210 eastbound	11.6	B	19.5	B
19th Street	33.6	C	37.1	D
Base Line Road	31.1	C	55.0	D
Vineyard Avenue				
Foothill Boulevard	28.3	D	49.7	D
Arrow Highway	30.6	D	35.6	D
Archibald Avenue				
SR-210 westbound	18.6	B	15.8	B
SR-210 eastbound	13.2	B	15.7	B
19th Street	28.5	D	37.8	D
Base Line Road	27.1	D	53.6	D
Foothill Boulevard	29.5	D	43.2	D
Arrow Highway	30.9	D	35.1	D
4th Street	34.4	D	37.4	D
Haven Avenue				
SR-210 westbound	16.0	C	20.4	C
SR-210 eastbound	18.0	B	15.8	B
Base Line Road	29.3	D	38.9	D
Foothill Boulevard	36.0	D	49.0	D
Arrow Highway	31.0	D	38.1	D
Milliken Avenue				
SR-210 westbound	18.0	B	13.9	B
SR-210 eastbound	15.7	B	16.0	B
Base Line Road	29.4	C	33.2	C
Foothill Boulevard	33.5	C	40.7	D
Arrow Highway	28.3	C	38.3	D
4th Street	34.2	C	47.8	D
Rochester Avenue				
Arrow Highway	48.5	D	99.9	F
with improvements	44.4	D	50.5	D
Day Creek Boulevard				
SR-210 westbound	18.4	B	16.8	B
SR-210 eastbound	15.1	B	16.2	B
Etiwanda Avenue				
Base Line Road	29.9	C	29.9	C
Foothill Boulevard	38.8	D	58.2	E
with improvements	35.5	D	41.8	D
Arrow Highway	99.9	F	99.9	F
with improvements	25.9	C	27.6	C
East Avenue				
Base Line Road	77.7	E	64.6	E
with improvements	31.7	C	32.1	C

**TABLE 4.16-3 (Continued)
YEAR 2030 INTERSECTION LOS**

Intersection	Peak Hour			
	AM		PM	
	Delay (in seconds)	LOS	Delay (in seconds)	LOS
I-15 southbound				
Beech Avenue	19.5	B	20.4	C
Base Line Road	22.6	C	14.3	B
Foothill Boulevard	9.7	A	7.5	A
I-15 northbound				
Beech Avenue	18.9	B	33.6	C
Base Line Road	14.3	B	18.9	B
Foothill Boulevard	12.3	B	14.3	B
Americana Way				
Base Line Road	22.0	C	23.0	C
Bold text identifies Delay and LOS that exceed standards.				
Source: Kunzman 2009.				

As indicated above, the City of Rancho Cucamonga has set a standard at LOS D or better for intersections in the City. Based on the Year 2030 projections, the following intersections are projected to operate at LOS E or worse:

- Rochester Avenue at Arrow Highway (LOS F in PM peak)
- Etiwanda Avenue at Foothill Boulevard (LOS E in PM peak)
- Etiwanda Avenue at Arrow Highway (LOS F in PM peak)
- East Avenue at Base Line Road (LOS E in PM peak)

Improvements to these intersections are needed to improve LOS and have been identified as follows:

Rochester Avenue at Arrow Highway:

Northbound right-turn overlap
Eastbound additional left-turn lane
Westbound right-turn overlap

Etiwanda Avenue at Foothill Boulevard:

Northbound additional through lane
Northbound right-turn lane
Southbound right-turn lane
Westbound additional through lane

Etiwanda Avenue at Arrow Highway:

Northbound additional through lane
Northbound right-turn lane
Southbound additional through lane
Eastbound additional through lane
Westbound right-turn lane

East Avenue at Base Line Road:

Northbound left-turn lane
Northbound additional through lane
Southbound additional through lane
Eastbound additional through lane
Westbound additional through lane

These improvements would lead to operations of LOS D or better at these intersections.

The Circulation Plan in the proposed 2010 General Plan Update's Community Mobility Element shows that the above-listed improvements have been planned to be constructed as necessary and prior to buildout. See Exhibit 4.16-3, Circulation Plan. Funding will be provided primarily through the DIF program.

The Community Mobility Element contains a number of goals and supporting policies that would maximize the operational efficiency of the street system (Goal CM-4) and that would require new development to mitigate impacts and contribute to the improvement to the City's transportation system (Goal CM-5). Implementation of these goals and policies would accommodate the roadway circulation needs of existing and future developments in the City.

Applicants for future development and redevelopment projects would be required to prepare traffic studies and participate in the DIF program for the improvement of the local and regional roadway network (SC 4.16-1). Improvements to the local and regional roadway network would include the improvement of the four intersections that are projected to operate at LOS E or worse by 2030. With local on-site or abutting roadway improvements provided by individual developments (SC 4.16-2) and regional transportation projects (SC 4.16-3), increases in traffic volumes are expected to be accommodated by the improved roadway system. Impacts would be less than significant; no mitigation is required.

Impact 4.16a: Buildout of the proposed 2010 General Plan Update would increase traffic volumes in the City, leading to four intersections operating at LOS E or worse by 2030. Improvements at these intersections would allow them to operate at LOS D or better. SCs 4.16-1, 4.16-2, and 4.16-3 would ensure improvement of the roadway system to accommodate future traffic volumes. Impacts would be less than significant; no mitigation is required.

Congestion Management Program

Threshold 4.16b: Would the proposed General Plan Update conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

As indicated above, the City of Rancho Cucamonga has identified an LOS standard of LOS D or better, while the San Bernardino County CMP uses an LOS standard of LOS E or better for CMP-designated roadways. Since future development and redevelopment projects would be subject to City review and compliance with the City's LOS D standard (SC 4.16-1), they are not expected to lead to intersections operating at LOS E or worse. When intersections are projected to operate at LOS E or worse, the requirement for appropriate mitigation would ensure that the development implements the necessary improvements to allow the affected intersections to operate at LOS D or better.

The CMP calls for local jurisdictions to develop and implement a development mitigation program that includes payment of fair share fees for the needed roadway system improvements. The City of Rancho Cucamonga's DIF program complies with the CMP, and the City collects DIF from new development (SC 4.16-1). These fees will be used to implement the City's needed roadway improvement projects. Regional transportation improvements are also expected to be implemented over time (SC 4.16-3) and would maintain LOS E or better operations at areawide intersections.

Thus, implementation of the proposed 2010 General Plan Update and future development and redevelopment pursuant to the proposed 2010 General Plan Update would lead to LOS D intersection operations in the City, which would not exceed the CMP standard of LOS E. No adverse impacts would occur; no mitigation is required.

Impact 4.16b: With compliance of the City's standard of LOS D or better, no exceedance of the CMP standard of LOS E would occur with future development and redevelopment under the proposed 2010 General Plan Update. Adherence to SCs 4.16-1 and 4.16-2 would ensure that no impacts would occur; no mitigation is required.

Air Traffic

Threshold 4.16c: Would the proposed General Plan Update result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would not be directly served by air transportation and this would not affect air traffic volumes at the LA/Ontario International Airport.

Goal CM-7 of the Community Mobility Element calls for a balance between the benefits of LA/Ontario International Airport and the impacts of aircraft operations. Supporting policies call for regional transit options (such as the extension of the Gold Line light rail system into the airport) between the City and the airport and consultation with the airport regarding noise, safety, and land use impacts to Rancho Cucamonga.

Development in the southwestern section of the City may affect aircraft operations at this airport and would need to comply with Part 77 of the Federal Aviation Regulations regarding structural height limits to prevent hazards to users, occupants, and visitors and to prevent obstruction to aircraft operations (see SC 4.8-9, in Section 4.8, Hazards and Hazardous Materials). This issue is discussed further in Section 4.8, Hazards and Hazardous Materials, of this PEIR. Impacts on air traffic patterns would be less than significant; no mitigation is required.

Impact 4.16c: Future development and redevelopment would not create a direct demand for air transportation; compliance with SC 4.8-9 from Section 4.8, Hazards and Hazardous Materials, would prevent any hazards to aircraft operations. Impacts would be less than significant; no mitigation is required.

Roadway Hazards

Threshold 4.16d: Would the proposed General Plan Update substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

During construction of roadway improvements associated with individual developments or City activities, traffic flows along various roadway segments may be affected as travel lanes are temporarily blocked to traffic. The City requires implementation of the standards in Title 12 of the Municipal Code (SC 4.16-2). Under this Title, an encroachment permit is needed for all construction or other activities within public rights-of-way. Any activity that would obstruct traffic flow requires compliance with the Work Area Protection and Traffic Control Manual. This Manual calls for the provision of traffic controls that include required signs, temporary striping,

driveway access, street closures, detours and barricades, flagger control, and other measures to maintain public convenience and safety for motorists, cyclists, pedestrians, and construction workers. Compliance with these guidelines would minimize traffic obstruction during construction and prevent hazards to all persons near the construction zones. Impacts due to temporary construction activities on public roadways would be less than significant; no mitigation is required.

Increases in vehicle trips on local roadways and freeways due to future development and redevelopment in the City could increase the potential for accidents. However, roadway improvements would have to be made in accordance with the City's Circulation Plan, roadway functional design guidelines, access and circulation design guidelines, and intersection line-of-sight design guidelines (SC 4.16-4). Compliance with these guidelines would allow City roadways to (1) accommodate vehicles and traffic volumes; (2) separate vehicle and pedestrian traffic; and (3) provide clear zones to prevent traffic accidents.

Conflicts between vehicular traffic and other forms of travel (bicyclists and pedestrians) may also cause traffic hazards. Implementation of Title 10 of the City's Municipal Code (SC 4.16-5) promotes traffic safety through the regulation and enforcement of speed limits, stop controls, driving rules, pedestrian rights and duties, parking permits, truck routes, and other street traffic regulations. Designated truck routes would also divert trucks from residential areas and would reduce hazards to pedestrians and local traffic. This standard condition would also reduce traffic hazards in the City. Thus, impacts related to traffic hazards would be less than significant; no mitigation is required.

Impact 4.16d: Increases in vehicle trips from future development and redevelopment under the proposed 2010 General Plan Update may increase the potential for traffic accidents. Compliance with SCs 4.16-2, 4.16-4, and 4.16-5 would prevent the creation of traffic hazards. Impacts would be less than significant; no mitigation is required.

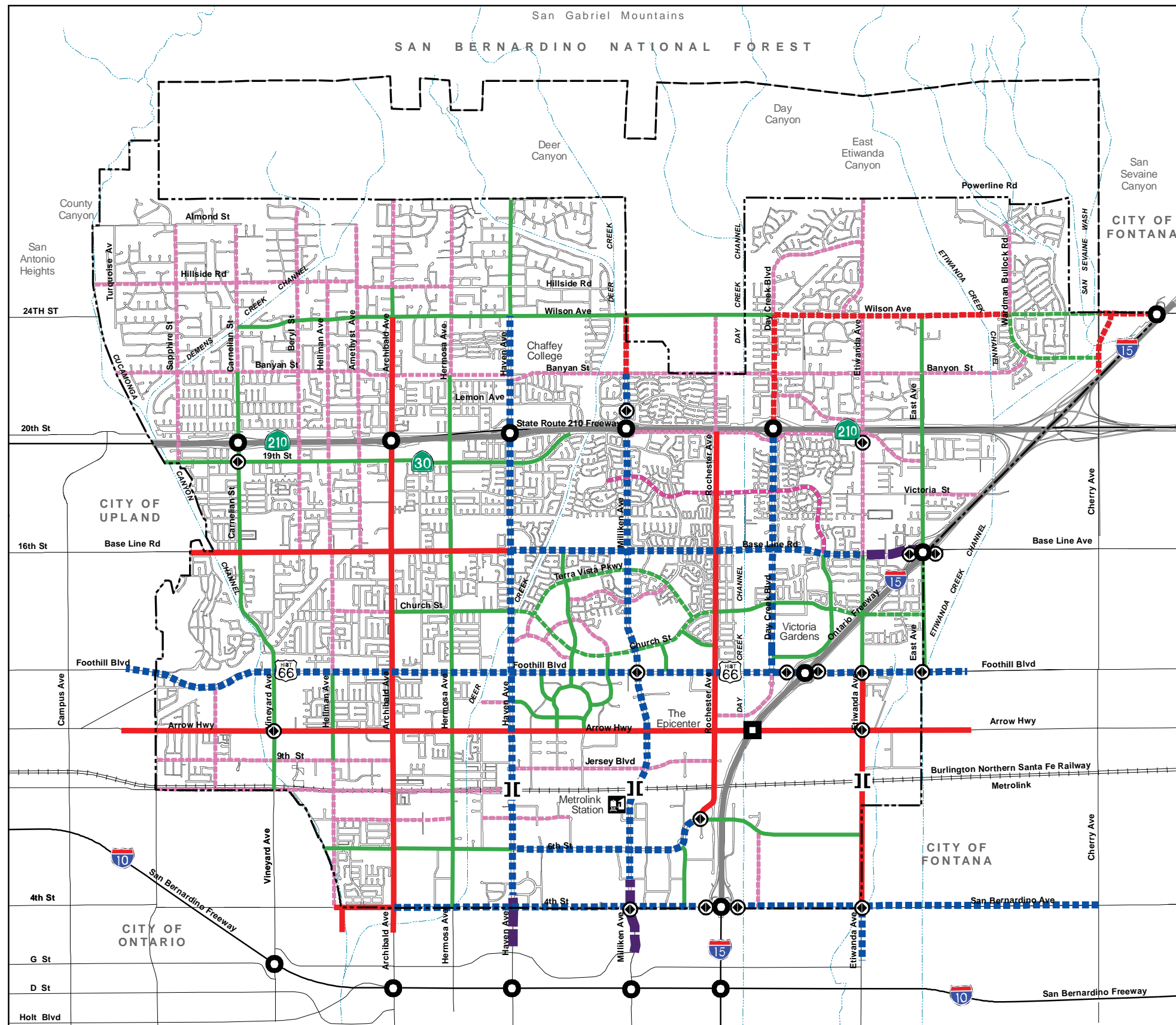
Emergency Access

Threshold 4.16e: Would the proposed General Plan Update result in inadequate emergency access?

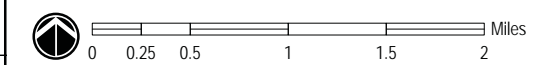
Future development and redevelopment is not expected in areas that are used for emergency access and evacuation. Evacuation routes include major roadways in the City, with freeways serving as primary exit routes for the planning area.

Site Access

Access to individual development sites would be made available through existing or planned roadways, as required under the City's Subdivision Ordinance – Title 16 of the Municipal Code, which requires all parcels to have access to a public street. Roadways, driveways, and parking lot aisles shall be designed and constructed in accordance with SC 4.16-4, which mandates following the City's roadway functional design guidelines, line-of-sight design guidelines, and access and parking design guidelines. Thus, future development and redevelopment pursuant to the proposed 2010 General Plan Update would have adequate site access. No adverse impact related to site access would occur; no mitigation is required



- Circulation Plan**
- Collector
 - - - Modified Collector with Median
 - Secondary
 - - - Modified Secondary with Median
 - Major Arterial
 - - - Modified Major with Median
 - Major Divided Arterial
 - Major Divided Highway
 - Freeway
 - Intersections Widened beyond Standards
 - Railroad Grade Separation
 - Freeway Interchange
 - Proposed Freeway Interchange
 - Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways



Circulation Plan

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-3



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Emergency Access and Evacuation

Construction activities on public rights-of-way may temporarily block traffic and access near the construction zone. Compliance with SC 4.16-2, which includes Title 12 of the City's Municipal Code and the standards in the Work Area Protection and Traffic Control Manual, would maintain emergency access to individual parcels at all times. The Manual specifies that early coordination with officials having jurisdiction over the affected cross streets and providing emergency services should occur before roadway or ramp closures. It also states that the needs of emergency service providers (law enforcement, fire, and medical) should be assessed and appropriate coordination and accommodations made. Thus, notification of the Rancho Cucamonga Police and Fire Departments of roadway construction work would allow for the use of alternative routes by emergency vehicles. This would avoid adverse impacts to emergency response and access.

The plan check and building permit process by the Rancho Cucamonga Fire Department includes review of access for emergency vehicles, in accordance with the California Fire Code (SC 4.14-3). Compliance with the requirements for emergency lane width, vertical clearance, and distance would ensure that adequate emergency access is available for all new development and redevelopment projects. New roadways are expected to be provided to serve future development in the hillside areas in the City's SOI in order to ensure that emergency vehicles can reach every structure built in this area. This access would also facilitate emergency evacuation of scattered developments anticipated in this area. Impacts on traffic flows for emergency response or evacuation would be less than significant; and no mitigation would be required.

Impact 4.16e: Future development and redevelopment under the proposed 2010 General Plan Update would have to provide emergency access in accordance with SCs 4.16-2 through 4.16-4. Compliance with these regulations would reduce impacts to less than significant levels; no mitigation is required.

Alternative Transportation

Threshold 4.16f: Would the proposed General Plan Update conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Future development and redevelopment pursuant to the proposed 2010 General Plan Update would increase vehicle trips and the use of alternative transportation systems in the City.

The proposed 2010 General Plan Update's Community Mobility Element provides emphasis on the developing alternative transportation systems to provide choices in travel within, to, and from the City. It promotes the development and use of alternative transportation systems through several goals and policies, including Goal CM-1 which calls for an integrated and balanced multi-modal transportation network in the City. Goal CM-2 calls for bicycling, walking, telecommuting, and use of energy-efficient vehicles as alternatives to the automobile. Goal CM-3 calls for a transportation system that includes connected transit, bicycle, and pedestrian networks. Policies that support these goals and those that promote bus transit use, walking, and bicycling are included in the Community Mobility Element, as listed above. Additionally, the Community Mobility Element includes a Bikeway Plan, which identifies the ultimate bikeway system to be implemented in the City. Thus, the proposed 2010 General Plan Update supports alternative transportation and beneficial impacts would occur.

In addition, the City's Trip Reduction Ordinance (SC 4.16-6) identifies the facilities that need to be provided in larger multi-family developments, commercial, office, and industrial projects; these would encourage the use of alternative transportation systems. Compliance with the SCAQMD's Rule 2202 (SC 4.16-7) would also reduce vehicle trips and trip lengths by encouraging the use of alternatives to the automobile. The Hiking and Riding Trails Master Plan (SC 4.16-8) also promotes walking/hiking, biking, and horse riding alternatives to reach various destinations in the City and surrounding areas. Implementation of SC 4.16-9 is also expected to lead to the expansion and improvement of transit systems in the County. No conflict with policies, plans and programs for alternative transportation would occur from future development and redevelopment under the proposed 2010 General Plan Update.

Impact 4.16f: The proposed 2010 General Plan Update promotes alternative transportation systems, through Goals CM-1, CM-2, CM-3, and their supporting policies. Future development and redevelopment would need to comply with SCs 4.16-6 and 4.16-7, which would provide facilities for alternative modes of transportation. Implementation of SC 4.16-8 and 4.16-9 would also encourage the use of alternative transportation modes. No conflict with policies, plans and programs for alternative transportation would occur; no mitigation is required.

4.16.7 CUMULATIVE IMPACTS

Traffic issues are generally regional in nature, with drivers and travelers commuting throughout the Southern California region to places of employment and residence. Thus, cumulative traffic impacts are evaluated based on impacts to the roadway transportation network that serves the region.

Future development and redevelopment pursuant to the proposed 2010 General Plan Update and future development and redevelopment in the rest of the region would increase the number of vehicle trips to, through, and from the City and within the region. Traffic congestion is expected to increase on freeways and major roadways, if no changes to the existing transportation network are made. Some vehicle trips would be confined to the City (short trips), while other trips would travel outside the City to surrounding cities and urban centers and would affect the regional transportation system.

Adverse impacts to the roadway circulation network would occur if the needed roadway improvements and trip-reduction measures and programs are not implemented. In accordance with City regulations, each development would be required to implement the roadway improvements on site and along its site boundaries and would be required to pay its fair share for needed improvements at off-site locations. Payment of the City's DIF would allow the City to fund signalization, roadway widening, and other transportation programs and improvements necessary to maintain acceptable levels of service at local intersections. The San Bernardino County Congestion Management Program (CMP) also calls for improvements to the designated CMP roadway network, to maintain levels of service at LOS E or better.

As approved by SANBAG, the City's DIF program collects fair share fees from new developments for funding roadway improvement projects that would relieve congestion at intersections and roadways in and near the City. Payment of fair share fees by individual developments would provide the necessary funding to implement roadway improvements that would reduce traffic congestion and maintain traffic safety. In accordance with SANBAG's Development Mitigation Nexus Study, future traffic volumes have also been projected and specific improvements to the regional transportation system have been identified. Funding for

these regional projects has been incorporated into the individual cities' DIF programs to allow for collection of adequate funding for these future transportation projects.

In coordination with the cities and counties in the SCAG region, SCAG has projected growth in population, housing, and employment. Travel forecasts for SCAG's RTP assume the buildout of (1) the City's proposed 2010 General Plan Update; (2) various community and subregional plans; and (3) the General Plans of the adjacent cities. The RTP is a long-range transportation plan that defines the vision and overall goals for the regional multi-modal transportation system and identifies needed multi-modal transportation improvements, including freeways, HOV facilities, bus and rail transit, freight movement, and aviation.

In support of the RTP, the RTIP lists the specific regional transportation projects needed to meet the region's circulation needs, along with each project's funding sources. Completion of these projects is expected to meet the transportation needs of the region to 2030.

Thus, traffic impacts associated with increases in traffic volumes at buildout of the City and SOI can be reduced or avoided through payment of fair-share development impact fees in accordance with SANBAG's Nexus Study and CMP; the City's roadway infrastructure projects; and project-level roadway improvements. These programs would maintain acceptable roadway operations and would prevent cumulatively significant adverse impacts in terms of traffic and circulation in the County. While increases in traffic volumes on the regional roadway network could be expected in the future, these increases have been considered and accounted for SCAG's RTP and RTIP. Completion of RTIP projects would serve the transportation and circulation needs of the region with no adverse impacts. No conflict with regional transportation plans is expected from the proposed 2010 General Plan Update.

Since the City's development impact fees would fund needed transportation projects (including regional traffic infrastructure), cumulative impacts would be less than significant. Planned roadway and freeway widening and improvement projects by various public agencies would also help improve the transportation system and traffic circulation in the region. Thus, no cumulative adverse impacts are expected.

4.16.8 MITIGATION MEASURES

No significant adverse impacts on traffic and transportation have been identified; therefore, no mitigation is required.

4.16.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Circulation System

Less Than Significant.

Congestion Management Program

No Impact.

Air Traffic

Less Than Significant.

Roadway Hazards

Less Than Significant.

Emergency Access

Less Than Significant.

Alternative Transportation

No Impact.

Cumulative Impacts

No Impact.

4.17 UTILITIES AND SERVICE SYSTEMS

This section addresses existing utilities and service systems for the proposed project and analyzes potential impacts on the availability and capacity of the local providers for the following wet and dry utilities (the service provider is noted parenthetically) with implementation of the proposed project:

- Water supply and distribution (Cucamonga Valley Water District [CVWD])
- Wastewater facilities (City of Rancho Cucamonga, CVWD and Inland Empire Utilities Agency [IEUA])
- Electricity (South California Edison [SCE] and Rancho Cucamonga Municipal Utility [RCMU])
- Natural gas (Southern California Gas Company [SCGC])
- Communication systems (Charter Communications and Time Warner)
- Solid waste (City of Rancho Cucamonga and County of San Bernardino Solid Waste Management Division [SWMD])

Information in this section is derived from CVWD's 2005 Urban Water Management Plan, CVWD's 2003 Water System Master Plan, the City's existing General Plan and the proposed 2010 General Plan Update, communication with the affected utilities, and the utilities' websites. Storm drain facilities are addressed in Section 5.9, Hydrology and Water Quality.

4.17.1 RELEVANT POLICIES AND REGULATIONS

Federal

Clean Water Act

The Clean Water Act (CWA) established regulatory requirements for potable water supplies including raw and treated water quality criteria. The CVWD is required to monitor water quality and conform to the regulatory requirements of the CWA.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA, *Health and Safety Code*, Sections 116350–116405) is intended to protect public health by regulating the nation's public drinking water supply. The Federal SDWA authorizes the United States Environmental Protection Agency (USEPA) to set national standards for drinking water to protect against both naturally occurring and man-made contaminants.

State

Safe Drinking Water Act

California enacted its own Safe Drinking Water Act, with the California Department of Health Services (DHS) granted primary enforcement responsibility. Title 22 of the *California Code of Regulations* (CCR)(Division 4, Chapter 15, "Domestic Water Quality and Monitoring Regulations") established DHS authority and provides drinking water quality and monitoring requirements, which are equal to or more stringent than Federal standards.

Recycled Water Regulations

The regulation of recycled water is vested by State law in the State Water Resources Control Board (SWRCB) and the California Department of Public Health Services (DPH). DPH is responsible for the regulations concerning the use of recycled water. Title 17 (*California Water Code*, Sections 13500–13556) regulates the protection of the potable water supply through the control of cross-connections with potential contaminants, including recycled water. The established water quality standards and treatment reliability criteria for recycled water are codified in Title 22 of the *California Water Code*. The requirements of Title 22, as revised in 1978, 1990 and 2001, establish the quality and/or treatment processes required for a recycled effluent to be used for a non-potable application. In addition to recycled water uses and treatment requirements, Title 22 addresses sampling and analysis requirements at the treatment plant, preparation of an engineering report prior to production or use of recycled water, general treatment design requirements, reliability requirements, and alternative methods of treatment.

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act)(California Water Code, Division 6, Part 2.6, Section 10610 et. seq.) was enacted in 1983. The UWMP Act applies to municipal water suppliers, such as the CVWD, that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (afy) of water. The UWMP Act requires these suppliers to update their Urban Water Management Plan (UWMP) every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple dry years.

Senate Bill 610 and Senate Bill 221

SB 610 amended State law¹ to improve the link between information on water supply availability and certain land use decisions made by cities and counties. Specifically, it requires land use planning entities (in this case, the City of Rancho Cucamonga), when evaluating certain large development projects, to request an assessment of water supply availability from the water supply entity that would provide water to the project. A water supply assessment (WSA) must be prepared in conjunction with the land use approval process associated with a project and must include an evaluation of the sufficiency of the water supplies available to the water supplier to meet existing and anticipated future demands, including the demand associated with the project in question, over a 20-year horizon that includes normal, single-dry, and multiple dry-years. An SB 610 WSA required for any “project” that is subject to CEQA and that proposes, among other things, residential development of more than 500 dwelling units.

In addition, SB 221 requires land use planning agencies, such as the City, to include (as a condition in any tentative map that includes a subdivision involving more than 500 dwelling units) a requirement to obtain a written verification from the applicable public water system or where there is no existing water supplier from a consultant directed by the City, that sufficient water supplies are available for the subdivision. SB 221 also addresses the issue of land use and water supply, but at a different point in the planning process than does SB 610. SB 221 requires a city or county to deny approval of a tentative or parcel map if the city or county finds that the project does not have a sufficient, reliable water supply as defined in the bill.

¹ SB 610 amended section 21151.9 of the California Public Resources Code, and amended sections 10631, 10656, 10910, 10911, 10912, and 10915 of, repealed section 10913 of, and added and amended section 10657 of, the California Water Code.

A General Plan Update is not subject to either SB 610 or SB 221 because a General Plan, in itself, does not grant entitlements. Instead, it provides a planning framework for future development within the City. However, as individual projects subject to these requirements are implemented under the 2010 General Plan Update, they will be reviewed for compliance with the requirements of SB 610 and/or SB 221, as applicable, to demonstrate adequate water availability.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Non-residential Buildings was established in 1978 in response to a mandate to reduce the State's energy consumption. These standards are promulgated under *California Code of Regulations* Title 24 Part 6 and are commonly referred to as "Title 24." The Title 24 standards are periodically updated to reflect new or improved energy efficiency technologies and methods. The most recent Title 24 standards were updated effective October 2005, with subsequent revisions and amendments. A new development project is required to incorporate the most recent Title 24 standards in effect at the time the building permit application is submitted.

California Integrated Waste Management Act (AB 939)

The California Integrated Waste Management Act of 1989 (AB 939) established the California Integrated Waste Management Board (CIWMB) and its review, approval, permitting and enforcement authority related to AB 939 requirements; required all counties to prepare an Integrated Waste Management Plan; and required all cities and counties to divert 50 percent of all solid waste from landfills or transformation facilities by January 1, 2000 through source reduction, recycling and compost activities, and established CIWMB.

California Solid Waste Reuse and Recycling Access Act of 1991

Subsequent to enactment of the California Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (Public Resources Code Section 42900–42911) directs the CIWMB to draft a "model ordinance" for the disposal of construction waste associated with development projects. If by September 1, 1994, a local agency did not adopt its own ordinance based on the CIWMB model, the CIWMB model took effect for that local agency.

Since 1994, the CIWMB model ordinance has been in effect for the County. On January 4, 2005, the County adopted the Construction and Demolition Debris Recycling and Rescue Ordinance. This ordinance will require most development projects in unincorporated areas to recycle or reuse 50 percent of the debris generated. The County began accepting Recycling and Reuse Plans on April 5, 2005.

Local

Cucamonga Valley Water District 2005 Urban Water Management Plan

Pursuant to the UWMP Act, described above, CVWD adopts a revised Urban Water Management Plan every five years. The current adopted plan is the 2005 UWMP. The 2005 UWMP describes the availability and reliability of water supplies through 2030 for normal, dry and multiple dry years.

Municipal Separate Storm Sewer System (MS4) Permit/NPDES Permit

The Federal Water Pollution Control Act prohibits the discharge of any pollutant to navigable waters (“waters of the U.S.”) from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. In 2002, the Santa Ana RWQCB issued an NPDES Storm Water Permit and Waste Discharge Requirements (Order No. R8-2002-0012) under the CWA and the Porter-Cologne Act for discharges of storm water runoff, snowmelt runoff, surface runoff and drainage within the Upper Santa Ana River watershed in San Bernardino and Riverside counties. This permit expired on April 27, 2007 and was administratively extended. Renewal of waste discharge requirements and an NPDES permit for San Bernardino County is in process under Order No. R8-2010-0036, NPDES No. CAS618036.

The City of Rancho Cucamonga is within the jurisdiction of the Santa Ana RWQCB and is subject to the waste discharge requirements of the MS4 Permit for San Bernardino and Riverside counties and the proposed permit for San Bernardino County. The County and cities within the County are Co-permittees under the MS4 permit, and have legal authority to enforce the terms of the permit in their jurisdictions.

4.17.2 EXISTING CONDITIONS

Water Supply and Infrastructure

CVWD service area covers approximately 47 square miles (about 30,000 acres), including the incorporated City of Rancho Cucamonga and a portion of the City’s SOI. The water system currently serves a population of over 186,000 customers with over 45,000 water connections. The predominant usage of water is residential consumption, which is consistent with the suburban community demographics of CVWD’s service area. CVWD has an average daily demand of approximately 50 million gallons per day (gpd)(CVWD 2010).

Water Sources

The CVWD’s three main sources of water include (1) groundwater, (2) local canyon runoff (surface and subsurface flows) and (3) imported surface water delivered through the Metropolitan Water District of Southern California (MWD). In addition, recycled water is a major component of the CVWD’s future water supply (CVWD 2005). In 2008, CVWD received 41 percent of its water from groundwater, 9 percent from canyon water and 50 percent from imported water (CVWD 2008). These water supply sources are discussed further below.

Groundwater

The CVWD receives water from the Cucamonga and Chino Basins. Both Basins are replenished by natural precipitation, spreading grounds, and percolation basins. Based on a 1958 Superior Court stipulated judgment, CVWD’s groundwater right in the Cucamonga Basin is limited to 15,540 afy. The total sustainable yield of the Cucamonga Basin is estimated to be 19,100 afy. The groundwater rights in Chino Basin were adjudicated as part of the Chino Basin judgment of 1975. The CVWD’s current aggregate annual groundwater right in Chino Basin is 10,016.184 afy. The average safe yield of the Chino Basin is 140,000 af (CVWD 2005).

Canyon Water

Over the years, CVWD has acquired surface and subsurface water rights in four local canyon watersheds within the San Gabriel Mountains to the north and adjacent the CVWD’s service

area, including Cucamonga Canyon, Deer Canyon, Day Canyon and Etiwanda Canyon. The total annual local canyon production from 1995 through 2004 ranged from a low of 1,892 af (2004) to a high of 9,580 af (1998). All water from the canyon sources flows to one of three CVWD-owned water treatment facilities (CVWD 2005).

Currently, there is not a requirement to allow a particular amount of canyon water to either replenish the groundwater basins or pass through other jurisdictions. Although canyon water will percolate and help to replenish the groundwater basins, CVWD has the right to withdraw surface water and, by this means, utilize this opportunity to provide for its customers (CVWD 2003).

Imported Water

The IEUA is responsible for responsible for importing water from the Metropolitan Water District of Southern California (MWD). The imported water from MWD is passed through to its eight member water agencies for their utilization (Rancho Cucamonga 2001a). Imported water is available from the State Water Project (SWP), water at Lake Silverwood, and Colorado River water at Lake Matthews. The CVWD's imported water purchases have ranged from 16,167 afy in fiscal year 1995-1996 to 19,156 afy in fiscal year 1997-1998. CVWD can import an amount of water equal to the size of its water treatment facilities. As discussed further below, water imported from MWD is treated at two CVWD water treatment facilities. The maximum water allocation CVWD can import is tied to the ultimate size of each plant.

Recycled Water

Wastewater generated within the CVWD's service area is discharged to the IEUA, which provides regional wastewater service to its member agencies, as discussed further below under "Wastewater Treatment and Infrastructure". All four of IEUA's wastewater treatment plants produce water that meets or exceeds State Title 22 recycled water quality standards. In addition, IEUA maintains an EPA/State approved industrial pre-treatment program for industrial discharges to the sewer system that requires dischargers to comply with water quality objectives and submit periodic monitoring reports to the IEUA. Recycled water supplies available for beneficial use, after discharge of a required 17,000 afy to the Santa Ana River, are expected to exceed 159,000 afy by 2025 (CVWD 2005). CVWD and IEUA have been working to increase the supply of recycled water through the Regional Water Recycling Project (Rancho Cucamonga 2009b).

Current and Planned Water Supplies

Table 4.17-1 summarizes the current and planned sources of water available to CVWD through 2030 as provided in the 2005 UWMP.

**TABLE 4.17-1
CURRENT AND PLANNED CVWD WATER SUPPLIES (AFY)**

Water Source	2005	2010	2015	2020	2025	2030
Imported water (MWD)	35,000	29,000	29,000	29,000	29,000	29,000
Groundwater – Chino Basin	13,000	28,000	34,000	37,000	37,000	37,000
Chino Basin Dry Year Yield Program ¹	411	2,430	2,430	2,430	2,430	2,430
Groundwater – Cucamonga Basin	5,400	5,400	5,400	5,400	5,400	5,400
Surface (canyon) water	3,000	3,000	3,000	3,000	3,000	3,000
Conservation	1,146	6,390	7,050	7,700	7,700	7,700
Recycled Water	1,270	10,250	15,900	19,220	21,600	21,600
Totals	59,227	84,470	96,780	103,750	106,130	106,130
¹ The Dry Year Yield Program provided funds to CVWD to drill four new wells in Chino Basin in return for which CVWD has agreed to increase groundwater production and reduce imported water use during dry years. Source: CVWD 2005.						

Water Conservation

CVWD is a signatory to the Memorandum of Understanding (MOU) regarding Urban Water Conservation in California and is therefore a member of the California Urban Water Conservation Council (CUWCC). CVWD has made a good faith effort to implement Best Management Practices (BMPs) described in the MOU and is an active participant in IEUA's Water Conservation Work Group and conservation meetings hosted by MWD (CVWD 2005). CVWD has implemented water conservation strategies using the following methods:

- “Best Management” Conservation Practices,
- Water Efficient Landscaping,
- Conservation Rebates,
- CVWD has joined the California Association of Water Agencies (ACWA) Save Our Water Campaign, and
- Water Awareness Month (CCWD 2003).

With 60 percent of household water consumption occurring outdoors, CVWD believes that promoting and educating customers on water efficient landscaping is important. CVWD has offered landscape conservation programs since 2004. Some of their programs include the Landscape Rebate Program, Landscape Workshops, rebates for outdoor water saving devices, and the newest program, the Landscape Recognition Program (CVWD 2010).

Water Quality

All public water supplies in California must meet both State and Federal regulations, summarized above, and CVWD must prepare an annual report on water quality that addresses both these requirements and provide it to customers. Potable water provided by CVWD to the City has consistently met Federal and State standards (Rancho Cucamonga 2009b).

Water Treatment and Distribution

As of 2006, CVWD maintained 23 groundwater wells, of which 13 were in service with a maximum production capacity of 20,490 gallons per minute (or an annual production equivalent of 33,076 af (Rancho Cucamonga 2009b).

With a large portion of water coming from local sources that include canyon surface waters and groundwater, CVWD has developed three water treatment facilities to ensure potable water quality meets all Federal and State requirements. The Arthur H. Bridge Treatment Plant treats surface water from Cucamonga Canyon and has a treatment capacity of 4 mgd, the Royal Nesbith Treatment Plant treats both surface water from Deer Canyon and East Canyon and imported (MWD) water and has a treatment capacity of 11 mgd, and the Lloyd W. Michael Treatment Plant treats solely imported (MWD) water and has a treatment capacity 60 mgd (Yu 2009).

Water treated at the Lloyd W. Michael Water Treatment Plant flows into storage reservoirs and then into the distribution system. Water treated at the Arthur H. Bridge and Royer Nesbit Water Treatment Plants is stored in enclosed reservoirs ready for distribution to consumers. Rancho Cucamonga's water distribution system is comprised of 690 miles of distribution mains, 22 pump stations, and 39 pressure-reducing valve stations. The CVWD has 34 water storage facilities that vary in size from 13 mg to 16 mg, with a combined design storage capacity of 89.6 mg. Seven storage facilities are located in the higher elevations above 2,267 feet. The CVWD continues to refine and improve its water system maintenance and operation procedures to ensure reliability. Its maintenance practices help reduce water loss from leaks in the distribution system, which contributes to the amount of available potable water in the City (Rancho Cucamonga 2009b).

Capital Improvements Program

The Capital Improvements Program (CIP) is a term used for the collective projects or elements to be undertaken that will require capital expenditure for improvements/expansion/ upgrades to facilities to meet the CVWD's future water service commitments and goals. The study describes the recommendations and the justifications for projects, including operating criteria to be met, and expected additional facilities to meet future water demands. The recommended CIP project improvements include the following:

- Supplies— projects for wells and/or groundwater treatment,
- Treatment Plants—future expansions and/or upgrades,
- Reservoirs and Booster Pumps—future expansion and/or upgrade, and
- Water Mains—main replacements and expansion (CVWD 2003).

Wastewater Infrastructure and Treatment

Wastewater conveyance is handled by the City and CVWD and wastewater is processed by CVWD and the IEUA. CVWD is one of eight member agencies that operate under the IEUA (Rancho Cucamonga 2001a). CVWD oversees the facilities and infrastructure that transports wastewater to treatment plants operated by the IEUA (Rancho Cucamonga 2009b).

The CVWD reports that the majority of development north of SR-210 is served by septic systems rather than connected to municipal wastewater infrastructure. For the remainder of the City, CVWD estimates that the total wastewater generation of Rancho Cucamonga is approximately 14 mgd (Perumean 2009).

The IEUA was formed in 1950 and is currently the regional wastewater treatment agency. IEUA provides services to the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga and Upland, as well as CVWD, the Monte Vista Water District and the Water Facilities Authority (IEUA 2009). IEUA operates 5 interconnected regional water-recycling

facilities that treat approximately 60 mgd and have a combined permitted capacity of 84.4 mgd (IEUA NPDES No. CA8000409). Two of five IEUA treatment plants serve development within the City of Rancho Cucamonga: Regional Plant No. 1 and Regional Plant No. 4, described further below (IEUA 2009). At all IEUA treatment plants, wastewater is subject to tertiary-level water treatment, which produces effluent suitable for reuse (e.g. irrigation, wetlands/wildlife habitat, groundwater recharge) (Rancho Cucamonga 2009b). IEUA also owns and operates a composting facility, a manure digestion facility, several domestic and industrial trunk and interceptor sewer lines, and operates the Chino I Desalter (IEUA 2009).

Regional Plant No. 1 (RP-1) is located in the City of Ontario near the intersection of Highway 60 and Archibald. RP-1 treats wastewater generated by the cities of Rancho Cucamonga, Montclair, Ontario and Upland (Perumean 2009). RP-1 treats an average flow of 34.6 mgd of wastewater and has a wastewater treatment capacity of 44 mgd (IEUA NPDES No. CA8000409). A portion of the recycled water is used to irrigate neighboring Whispering Lakes Golf Course and Westwind Park. Recycled water from RP-1 is also used in the Prado Park Lakes. The methane gas produced during the digestion process is used to power co-generators. RP-1's generators supply enough energy to operate the entire plant – of which 60 percent comes from the digestion of the methane gas (IEUA 2009).

Regional Plant No. 4 (RP-4) is located in the City of Rancho Cucamonga at the intersection of 6th Street and Etiwanda. RP-4 treats wastewater generated by the cities of Rancho Cucamonga and Fontana (Perumean 2009). RP-4 treats an average flow of 6.1 mgd, and has a treatment capacity of 14 mgd (IEUA NPDES No. CA8000409). RP-4 works in conjunction with RP-1 to provide recycled water to users within the service areas of RP-1 and RP-4 (IEUA 2009).

Electricity, Natural Gas and Communication Infrastructure

Electricity and Natural Gas

Southern California Edison (SCE) provides electrical service to the City. In addition, the Rancho Cucamonga Municipal Utility (RCMU) was established to enable the City of Rancho Cucamonga to deal with energy issues at the local level. The recently formed city-owned utility serves the Victoria Arbors Regional Mall development as well as surrounding retail and commercial development, which fall within RCMU's sphere-of-service. More than 72,000 megawatt-hours of electricity are distributed annually to customers through 20 circuit miles of wire spread across roughly 4 square miles serviced by RCMU. In June 2008, RCMU's historical peak demand was 14.4 megawatts (Rancho Cucamonga 2007b).

The Southern California Gas Company (SCGC) provides natural gas service to the City. Both SCE's and SCGC's operations are regulated by the California Public Utilities Commission (CPUC) and other State and Federal agencies (Rancho Cucamonga 2001a).

Communication Systems

Communication services, including digital cable and high-speed internet services, in the City of Rancho Cucamonga are provided by Charter Communications (Charter) and Time Warner Cable (Time Warner). Time Warner serves a portion of the City as well as the cities of Upland and Ontario.

Existing communication systems include technologies such as fiber optics, electric wave transmission lines, and wireless transmissions. Because service providers are private enterprises, the City's role is focused on quality service and equal access to telecommunication technologies for all local users. In addition, RCTV-3, the government access cable television

channel managed by Rancho Cucamonga, provides Rancho Cucamonga area viewers with informational messages concerning programs and events sponsored or co-sponsored by the City, local school districts, and other local government agencies. In addition to these community messages, RCTV-3 broadcasts the Rancho Cucamonga City Council meetings. RCTV-3 also provides public educational video programming regarding various safety, environmental, recreational, and government-related issues.

Solid Waste

Solid waste collection and transport in the City of Rancho Cucamonga is handled by contracted private firms that haul collected materials to regional landfills and materials recycling facilities. For household waste disposal, the City contracts with a private hauling firm, Burrtec Waste Industries, Inc. (Burrtec), which uses a three-bin system for recycling and waste disposal. The blue bin allows for recyclable materials including paper, cartons, metal cans and trays, and plastic container items. The green bin allows for composting materials such as grass clippings, brush, prunings leaves, tree trimmings, twigs, weeds, and other green waste. The black bin allows for materials that are not recyclable or compostable. The City also has a permanent drop-off facility for household hazardous waste (HHW) at a San Bernardino County facility within the community (Rancho Cucamonga 2009b).

In July 2001, the County of San Bernardino contracted Burrtec to operate and maintain their solid waste disposal facilities located throughout the County. This includes both active and closed landfills, transfer stations and community collection centers (Burrtec 2005). Solid waste generated in the City is transferred to Burrtec's West Valley Materials Recovery Facility (MRF), located immediately southeast of the City at 13373 Napa Street in Fontana. Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill, a County Class III (i.e., municipal waste) landfill located at 2390 North Alder Avenue in Rialto (Ceballos 2009). Mid-Valley Landfill has a daily permitted capacity of 7,500 tons per day (tons/day), a remaining capacity of 670,000 cubic yards (cy), and an anticipated close date of 2033 (CIWMB 2010).

To attain the goals of AB 939, the City implemented a series of programs with local businesses and public agencies for recycling materials that significantly decreased the amount of waste the City sent to landfills. In addition to the existing recycling programs, one of the basic principles of "Green Building," discussed in the Resource Conservation Chapter, is to use recycled and re-used materials in new construction. Construction and building demolition debris produces large quantities of solid waste, much of which can be recycled or processed for reuse.

In 2000, Rancho Cucamonga was diverting 35 percent of its waste from landfills. By 2006 (the most recent year a CIWMB-approved diversion rate is available), Rancho Cucamonga diverted 57 percent of its waste from landfills through recycling and reuse. In 2008, the California State Senate passed Senate Bill 1016 (SB 1016) that builds upon AB 939. Instead of looking at diversion rates for cities and counties, the new law requires jurisdictions to report waste generation factors based on disposal weight, as report by disposal facilities, and reported population and employment data (Rancho Cucamonga 2009b). The City's target and the disposal rates for 2007 and 2008 are summarized in Table 4.17-2 below. As shown, the actual rates of disposal for both 2007 and 2008 are well below the target rates.

**TABLE 4.17-2
CITY OF RANCHO CUCAMONGA SOLID WASTE DISPOSAL RATES**

Calculated Disposal Rates	Pounds Per Person Per Day		
	Target	2007	2008
Per Resident	6.8	5.3	4.5
Per Employee	16.7	12.9	11.5
Source: Rancho Cucamonga General Plan Update: Public Facilities and Infrastructure Chapter			

4.17.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are derived from the Environmental Checklist Form included as Appendix G of the CEQA Guidelines. The project would result in a significant adverse impact related to utilities and service systems if it would:

- Threshold 4.17a:** Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Threshold 4.17b:** Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Threshold 4.17c:** Require new or expanded entitlements and resources to have sufficient water supplies available to serve the project;
- Threshold 4.17d:** Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Threshold 4.17e:** Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or
- Threshold 4.17f:** Comply with Federal, State, and local statutes and regulations related to solid waste.

The City of Rancho Cucamonga, similar to most cities in southern California, does not have an established threshold for effects to dry utilities (electricity, natural gas, and communication systems). For purposes of this analysis, the following threshold of significance was applied for the analysis of dry utilities. The project would result in a significant adverse impact related to utilities and service systems if it would:

- Threshold 4.17g:** Require or result in the construction of new electric, natural gas or communication facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4.17.4 GENERAL PLAN GOALS AND POLICIES

Water Supply and Infrastructure

Goal PF-5: *Ensure provision of water infrastructure to support future growth needs and existing development.*

Policy PF-5.1: Support programs of the CVWD that make every practical effort to minimize leaks in the water and recycled water distribution systems, through regular monitoring and maintenance.

Implementation Action: *Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge.*

Policy PF-5.2: Support the efforts of the CVWD and San Bernardino County agencies to provide and expand water treatment facilities to treat local water sources from canyon surface waters and groundwater.

Implementation Action: *Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge. Continue to consult with the CVWD on meeting targets for water recycling and conservation. Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit. Provide CVWD with requested population projections and other information that will inform regular updates of CVWD's Urban Water Management Plan. Continue to coordinate information and regulations between the multi-agency and multi-jurisdictions sharing the collective watershed.*

Goal RC-2: *Provide adequate, reliable, and sustainable water supplies to the community.*

Policy RC-2.1: In consultation with the Cucamonga Valley Water District and other agencies, designate appropriate land use patterns and take other suitable actions to protect major areas within the Planning Area that are critical to replenishment of groundwater supplies and local surface waters.

Implementation Action: *Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge.*

Policy RC-2.2: Continue to consult with the Cucamonga Valley Water District and support programs that protect water quality, conserve water usage, and promote re-use of water in accordance with State guidelines.

Implementation Action: *Continue to consult with the CVWD on meeting targets for water recycling and conservation.*

Policy RC-2.3: Explore sustainable methods to increase water production and distribution capabilities to meet future City demand.

Implementation Action: *Continue to consult with the CVWD to ensure that development activities retain designated areas for groundwater recharge.*

Policy RC-2.4: Promote the protection of natural stream courses from erosion and from polluted urban runoff.

Implementation Action: Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit.

Policy RC-2.5: Advocate for the regular evaluation of the entire water supply and distribution system to ensure its continued adequacy, reliability, and safety.

Implementation Action: Provide CVWD with requested population projections and other information that will inform regular updates of CVWD's Urban Water Management Plan.

Policy RC-2.6: Where it is consistent with public safety priorities, take actions to retain natural drainage courses within the Planning Area.

Implementation Action: Develop standards for City staff to use during the review of development proposals to consider requiring greater setbacks and preventative landscape strategies, and limiting access to minimize impacts. Implement required provisions of the City's NPDES permit.

Policy RC-2.7: Protect the watershed by achieving mandates imposed by regulations.

Implementation Action: Continue to coordinate information and regulations between the multi-agency and multi-jurisdictions sharing the collective watershed.

Goal RC-3: Support the use of water that is both efficiently consumed and recycled to minimize waste and maximize supplies.

Policy RC-3.1: Require the use of cost-effective methods to conserve water in new developments, and promote appropriate water conservation and efficiency measures for existing businesses and residences.

Implementation Action: Develop educational materials detailing the City's requirements for water conservation within new development proposals and tips for end-users to employ better practices for water conservation.

Policy RC-3.2: Encourage the conversion of water-intensive turf/landscape areas to landscaping that uses climate-appropriate plants, efficient irrigation systems, and water efficient site maintenance.

Implementation Action: Continually update the Water Efficiency Ordinance to meet current State requirements as necessary.

Policy RC-3.3: Support efforts to expand the recycled water distribution system and actively promote the widespread use of recycled water in Rancho Cucamonga.

Implementation Action: Continue to consult with the CVWD on meeting targets for water recycling and conservation.

Policy RC-3.4: Maximize water efficiency and the use of alternative sources of water in City operations, and develop water-related best practices and model programs.

Implementation Action: Continue with City efficiency programs to conserve water and lead by example.

Wastewater Infrastructure and Treatment

Goal PF-6: Provide adequate and reliable wastewater collection and treatment facilities to meet current and future needs.

Policy PF-6.1: Continue to ensure an adequate treatment and collection system capacity for Rancho Cucamonga's wastewater that is conveyed to the Inland Empire Utilities Agency water reclamation facilities, while protecting water quality and public health and minimizing adverse impacts to the environment.

Implementation Action: Consult on the periodic analysis by the CVWD and other responsible agencies to ensure that operating levels remain the same. For major development projects, require capacity assessments of both transmission and treatment facilities.

Policy PF-6.2: Consult with the Inland Empire Utilities Agency and the Cucamonga Valley Water District to ensure that the treatment facility has sufficient capacity to meet future wastewater treatment needs.

Implementation Action: Consult on the periodic analysis by the CVWD and other responsible agencies to ensure that operating levels remain the same. For major development projects, require capacity assessments of both transmission and treatment facilities.

Electricity, Natural Gas and Communication Systems

Goal RC-4: Encourage the use of energy resources that are efficiently expended and obtained from diverse and sustainable sources, in an effort to minimize greenhouse gas and other air emissions.

Policy RC-4.1: Pursue efforts to reduce energy consumption through appropriate energy conservation and efficiency measures throughout all segments of the community.

Implementation Action: As it becomes economically practical, identify sources and replace imported, non-renewable energy resources with domestic renewable energy sources such as solar and wind energy, recycled municipal solid waste, and green waste.

Policy RC-4.2: Promote the use of renewable energy and alternative energy technology, and support efforts to develop small-scale, distributed energy generation (e.g. solar, wind, cogeneration, and biomass) to reduce the amount of electricity drawn from the regional power grid and reduce the use of natural gas, while providing Rancho Cucamonga with a greater degree of energy and economic self-sufficiency.

Implementation Action: Provided that there would not be a decline in services to City residents or undue tax burden, use of energy efficiency and renewable energy resources will be employed for approving capital and operational expenditures.

Policy RC-4.3: Encourage the use of solar energy systems in homes and commercial businesses.

Implementation Action: Establish design criteria for active and passive solar applications within development proposals.

Policy RC-4.4: Reduce operational energy requirements through sustainable and complementary land use and circulation planning. Support implementation of State mandates regarding energy consumption and greenhouse gas reduction, including AB32 and SB375.

Implementation Action: Promote land use and circulation patterns that result in multi-purpose automobile trips and that facilitate the use of local and regional transit; continue to advance land use patterns that provide employment and housing opportunities for City residents in a manner that allows for practical options for mobility other than by automobile.

Policy RC-4.5: Support the development of private sources of sustainable and environmentally friendly energy supplies, provided these are consistent with City aesthetic and public safety goals.

Implementation Action: Continue to make the recruitment and retention of “green” industries a priority in conjunction with economic development strategies.

Goal RC-5: Encourage the use of energy conservation strategies in City projects and operations to maximize energy efficiency and serve as a role model to the community and the region.

Policy RC-5.1: Serve as a role model by adopting recognizable standards and incorporating the use of sustainable strategies for new and existing public buildings that maximize occupant health and productivity, minimize operating costs, and provide good environmental stewardship.

Implementation Action: Collaborate and educate City departments on sustainable strategies that can be employed in new and existing public buildings.

Policy RC-5.2: Investigate the feasibility of using solar (photovoltaic) lights for City operated parking lots instead of conventional street and pedestrian lights that are powered by electricity in an effort to conserve energy.

Implementation Action: Establish a retrofit program as photovoltaic street lighting becomes more cost-effective than other technologies.

Policy RC-5.3: Explore and consider the costs and benefits of alternative fuel vehicles, including hybrid, electric, natural gas, and hydrogen powered vehicles when purchasing new City vehicles.

Implementation Action: Continue to meet the objective of reducing fuel consumption when negotiating for new or replacements to the City’s fleet vehicles.

Goal RC-6: Encourage and support green buildings in Rancho Cucamonga.

Policy RC-6.1: Add energy efficiency standards in the Rancho Cucamonga Municipal Code based on green building principles, to reduce energy consumption (particularly for heating, cooling, and lighting) in new construction.

Implementation Action: Adopt a formal green building program or create one based on a national model, such as LEED, GreenPoint Rated, and/or other programs into the City's codes.

Policy RC-6.2: Encourage green practices for new and existing buildings throughout the community.

Implementation Action: Provide developer incentives for constructing green buildings.

Policy RC-6.3: Promote energy-efficient design features, including but not limited to appropriate site orientation, use of light-colored roofing and building materials, and use of evergreen trees and wind-break trees to reduce fuel consumption for heating and cooling beyond the minimum requirements of Title 24 State Energy Codes.

Implementation Action: Review and update the City's design guidelines to address energy-efficient design features.

Policy RC-6.4: Promote green practices and the use of energy saving designs and devices for new and existing buildings throughout the community. Consult with energy providers such as Southern California Edison, Southern California Gas, the Rancho Cucamonga Municipal Utility, and others to establish and coordinate energy efficiency programs that promote energy efficient design in all projects and assist residential, commercial, and industrial users.

Implementation Action: During the development review process for larger development projects (greater than 10 units/or 10,000 square feet), coordinate with energy providers to determine if additional energy efficiency measures can be incorporated into a project design.

Goal PF-8: Support access to high-quality established and emerging communications technologies to facilitate efficient and affordable communication for individuals, businesses, educational institutions, and government functions.

Policy PF-8.1: Support efforts to develop and utilize improved communications technologies in a manner that minimizes visual and environmental impacts to the surrounding area, while benefiting government, business, education, and public safety.

Implementation Action: Continue to analyze any future communication technology improvements to adjust existing policies and regulations to ensure visual and environmental impacts are mitigated.

Policy PF-8.2: Make efforts to accommodate future communications and information technologies as they develop, and to replace or remove redundant or outdated technology and its associated equipment.

Implementation Action: Provide state-of-the-art technology wherever and whenever feasible for City communications needs.

Solid Waste

Goal PF-7: *Minimize the volume of solid waste that enters regional landfills and encourage recycling.*

Policy PF-7.1: Continue to adopt programs and practices that minimize the amount of materials entering the waste stream. Encourage recycling and composting in all sectors of the community, including recycling of construction and demolition materials, in order to divert items from entering landfills.

Implementation Action: *Continue with aggressive waste reduction programs to comply with the provisions of State law.*

Policy PF-7.2: Consult with public agencies and private contractors to ensure adequate refuse collection and disposal facilities are available.

Implementation Action: *Periodically review the City's waste collection programs and contracts to ensure that service is provided in a manner that maintains high service levels, maximizes recycling, and minimizes impact on regional disposal facilities.*

Policy PF-7.3: Embrace the sustainability principle that recognizes and takes advantage of the life cycle of goods and materials.

Implementation Action: *Continue to maintain the Green Matrix and coordinate City personnel responsible for City purchasing and operations to choose goods and materials that are environmentally sustainable and cost effective.*

Policy PF-7.4: Serve as a role model to businesses and institutions regarding practices and procedures that minimize the generation of solid waste.

Implementation Action: *Provide awareness bulletins to the City residents and businesses on programs that the City is implementing in-house to reduce, recycle, and reuse.*

Policy PF-7.5: Continue to educate the community regarding the benefits of solid waste diversion, recycling and composting, and maintain programs that make it easy for all people in Rancho Cucamonga to work toward and achieve City waste reduction objectives.

Implementation Action: *Continue to promote local recycling of wastes and use of recycled materials by implementing provisions of AB 939 and adopting incentives, regulations, and procedures to specify local recycling requirements.*

Goal PS-3: *Protect City residents, businesses, and employees from the potential hazards associated with the use, storage, transport, and disposal of hazardous materials in and through Rancho Cucamonga.*

Policy PS-3.3: Educate residents and businesses about proper disposal methods of household hazardous waste, and the availability of less toxic materials that can be used in place of more toxic household materials.

Implementation Action: Continue to provide education materials to City residents regarding the proper handling and disposal of household hazardous wastes, and continue to maintain a convenient drop-off facility for disposal.

4.17.5 STANDARD CONDITIONS OF APPROVAL

- SC 4.17-1** The City of Rancho Cucamonga shall ensure that all future projects implemented pursuant to the 2010 General Plan Update that are subject to SB 610 and/or SB 221 shall comply with all applicable requirements in order to demonstrate the availability of an adequate and reliable water supply.
- SC 4.17-2** The City of Rancho Cucamonga shall ensure that all future projects implemented under the 2010 General Plan Update that result in a new or modified point source comply with all applicable San Bernardino County Stormwater NPDES Permit rules.
- SC 4.17-3** Water and sewer plans shall be designed and constructed to meet the requirements of the Cucamonga Valley Water District (CVWD), Rancho Cucamonga Fire Protection District, and the Environmental Health Department of the County of San Bernardino. A letter of compliance from the CVWD is required prior to final map approval or issuance of permits, whichever occurs first. Such letter must have been issued by the water district within 90 days prior to the final map approval in the case of subdivision or prior to the issuance of permits in the case of all other residential projects.
- SC 4.17-4** The City of Rancho Cucamonga shall ensure that all future projects implemented under the 2010 General Plan Update shall comply with all State Energy Efficiency Standards and City of Rancho Cucamonga codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, and construction and the use of energy saving appliances, conditioning systems, water heating, and lighting.) Plans submitted for building permits shall include written notes demonstrating compliance with energy standards and shall be reviewed and approved by the Planning Department prior to building permit issuance.
- SC 4.17-5** For existing structures, underground on-site utilities are to be located and shown on building plans submitted for building permit application.
- SC 4.17-6** Provide separate utility services to each parcel including sanitary sewerage system, water, gas, electric, power, telephone, and cable TV (all underground) in accordance with the Utility Standards. Easements shall be provided as required.
- SC 4.17-7** The developer shall be responsible for the relocation of existing utilities as necessary.

4.17.6 ENVIRONMENTAL IMPACTS

Water Supply and Infrastructure

Threshold 4.17b: Would the proposed 2010 General Plan Update require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?²

Threshold 4.17c: Would the proposed 2010 General Plan Update require new or expanded entitlements and resources to have sufficient water supplies available to serve the project?

Based on population data from the California Department of Finance, the CVWD's 2005 UWMP includes future water demand projections through 2030. In 2030, the anticipated population of the CVWD service area is 248,000 people; associated water demand is estimated to be 86,000 afy. As discussed in Section 3, Project Description, at the target density of development addressed in the proposed 2010 General Plan Update, the City's 2030 population is expected to reach 203,400 persons, or approximately 43,000 fewer persons than anticipated by CVWD. Therefore, while the 2010 General Plan Update was not specifically considered during preparation of the 2005 UWMP, the expected population growth is substantively lower than the expected population used as the basis of CVWD's water supply planning in the 2005 UWMP. In addition, the CVWD has provided a letter to the City regarding the EIR's analysis of water supply for the proposed 2010 General Plan Update that states: "Based on current analysis, it is anticipated that the District will be capable of meeting the water demands for the existing and future 20-year projected planned growth within the District's service area under normal, single-dry and multiple-dry year conditions through imported water supplies from Metropolitan Water District of Southern California (MWD), as well as local surface and groundwater supplies and through recycling and water conservation" (Appendix I). Therefore, adequate water supplies would be available to serve proposed land use development consistent with the 2010 General Plan Update.

The 2010 General Plan Update's goals and policies aim to increase water conservation, increase groundwater availability (reducing dependence on imported water), and reduce demand for potable water by utilizing more recycled water would support the CVWD's efforts to ensure adequate and reliable long-term water supplies, specifically Goals RC-2 and RC-3 and associated policies. Further, as individual projects are proposed in the City that are subject to SB 610 and/or SB 221, these projects would be required by comply with these processes to substantiate the availability of water supplies (SC 4.17-1). Therefore, there would be a less than significant impact related to water supplies.

Regarding water treatment, while additional development under the 2010 General Plan Update would increase water use within the City, the CVWD reports that expanded water treatment facilities would not be necessary to serve buildout of the proposed 2010 General Plan Update (Yu 2009). The CVWD's three treatment plants treat both surface water and/or imported water. CVWD states that the recovery of surface (canyon) water resources for potable water use is currently maximized and therefore would not increase in the future. Similarly, the volume of water imported via MWD water would remain the same or be reduced in the future (Yu 2009). Therefore, because CVWD reports there is more than adequate capacity at the three water treatment plants and because there would not be an anticipated need to increase the volume of

² The following analysis addresses only water treatment facilities. The analysis of wastewater treatment facilities is provided below in this section.

water treatment in the future, significant environmental impacts would not be expected related to the need for new or expanded water treatment facilities.

The 2010 General Plan Update's Goal PF-5 and Policies PF-5.1 and PF-5.2 require the City to ensure provision of water supplies and infrastructure to support future growth and existing development through both maintenance and expansion, when necessary, in consultation with CVWD and County agencies.

Impacts 4.17b and c: There would be adequate water supplies available to serve proposed land uses under the 2010 General Plan Update. Implementation of SB 610 and/or SB 221, where required (SC 4.17-1), and the identified 2010 General Plan Update goals and policies related to water supply and infrastructure would contribute to ensuring that adequate water resources would be available for future development in the City. A less than significant impact would occur; no mitigation is required.

Wastewater Infrastructure and Treatment

Threshold 4.17a: Would the proposed 2010 General Plan Update exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Threshold 4.17b: Would the proposed 2010 General Plan Update require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Threshold 4.17d: Would the proposed General Plan Update result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed above, the Santa Ana RWQCB is the applicable Regional Quality Control Board for the City of Rancho Cucamonga and administers the City's MS4/NPDES permit. New development with implementation of the 2010 General Plan Update would be required to comply with all applicable wastewater discharge requirements of the NPDES program, as enforced by the Santa Ana RWQCB (SC 4.17-2) as well as CVWD standards (SC 4.17-3). Therefore, implementation of the 2010 General Plan Update would not result in an exceedance of wastewater treatment requirements and would be less than significant.

Implementation of the 2010 General Plan Update would generate increased wastewater flows and increased demand on the existing wastewater conveyance and treatment infrastructure. As noted above, much of the existing development north of SR-210 is on septic systems, and CVWD expects this to continue into the foreseeable future due to the expense and effort involved in tying existing and new properties into the municipal sewer system (Perumean 2009). For the remainder of the City, wastewater generation is treated at IEUA's RP-1 and RP-4 facilities. RP-1 currently has an average excess capacity of approximately 9 mgd (IEUA NPDES No. CA8000409). CVWD reports that because all other cities than Rancho Cucamonga that are served by RP-1 (Upland, Montclair and Ontario) are built out "bedroom communities", additional wastewater generation would result primarily from growth in Rancho Cucamonga. However, the portion of the City served by RP-1 (the western half and southern third) are the more developed areas of the City and additional development and redevelopment sufficient to exceed the

remaining capacity of RP-1 is not anticipated with implementation of the proposed 2010 General Plan Update. Regardless, RP-1 is built out and cannot be further expanded (Perumean 2009). Therefore, there would be no environmental impacts related to potential expansion of RP-1.

Wastewater generation in excess of RP-1's capacity, though considered unlikely, would be diverted to RP-4. RP-4 serves the eastern half of the City generally north of Arrow Route. When RP-4 was initially constructed, the site perimeter and layout was planned for an ultimate capacity of 28 mgd to be implemented in 4 phases, as necessary. To date, 2 phases have been completed, providing 14 mgd of treatment capacity (Perumean 2009). Based on the existing average flow of 6.1 mgd, RP-4 provides a current excess capacity of 7.9 mgd and a potential excess capacity of 21.9 mgd. The CVWD reports this is considered more than adequate capacity to treat all increases in wastewater generation with implementation of the proposed 2010 General Plan Update (Perumean 2009). By way of comparison, as noted above, the City's current total wastewater generation is 14 mgd. As the proposed 2010 General Plan Update would result in less additional development than currently existing (i.e., development will not be doubled), the potential increases in wastewater generation would be less than 14 mgd and would be within the potential capacity of RP-4.

In the event that RP-4 is expanded to serve growth in the City of Rancho Cucamonga as a result of the 2010 General Plan Update, this would occur entirely within the facilities' existing footprint, which has been expressly planned to accommodate such an expansion (Perumean 2009). Because of this, environmental impacts from RP-4 expansion, which would be addressed in documentation required pursuant to CEQA, would not be expected to be significant and would likely be focused on construction-phase impacts.

The 2010 General Plan Update's Goal PF-6 and Policies PF-6.1 and PF-6.2 require the City to ensure that adequate and reliable wastewater collection and treatment facilities are available to serve future growth while minimizing environmental impacts. Based on the above discussion and the identified 2010 General Plan Update goals and policies, there would be a less than significant impact related to wastewater treatment and conveyance infrastructure.

Impacts 4.17a, 4.17b, 4.17d: Implementation of the 2010 General Plan Update would not result in an exceedance of wastewater treatment requirements with compliance with NPDES wastewater discharge requirements (SC 4.17-2) and CVWD standards (SC 4.17-3) and there would be a less than significant impact. There would be adequate capacity at the wastewater treatment plants serving the City (RP-1 and RP-4) with implementation of the 2010 General Plan Update. If RP-4 is expanded in the future to the planned 28 mgd, this would occur entirely within the facilities' existing footprint, which has been expressly planned to accommodate such an expansion. Therefore, based on this and the identified 2010 General Plan Update goals and policies related to wastewater infrastructure, there would be a less than significant impact related to wastewater treatment and conveyance infrastructure. No mitigation would be required.

Electricity, Natural Gas and Communication Infrastructure

Threshold 4.17g: Would the proposed 2010 General Plan Update require or result in the construction of new electric, natural gas or communication facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Implementation of the 2010 General Plan Update would result in increased demand for electricity, natural gas and communication services. The 2010 General Plan Update's Goal RC-5 and Policies RC-5.1 through RC-5.3, and Goal RC-6 and Policies RC-6.1 through RC-6.4 promote energy efficiency and use of alternative energy sources as part of implementing future growth in the City. The 2010 General Plan Update's Goal PF-8 and Policies PF-8.1 and PF 8.2 state the City's desire to support access to established and emerging communication technologies, while minimizing environmental impacts. Also, SC 4.17-4 requires the City to implement all applicable Title 24 energy efficiency standards into new development and redevelopment projects.

As discussed above, both SCE and SCGC are regulated by the CPUC, which mandates that electric and natural gas service must be provided to new customers. The need for, and location of, new or expanded dry utility infrastructure, including communication systems, would be determined on a project-by-project basis. Generally, extension of dry utility services to new development occurs within the service provider's easement or within that project's boundary. Additionally, SCs 4.17-5 through 4.17-7 require provision of utilities and places the responsibility for relocation of on-site utilities with the future project developer(s). The potential environmental impacts related to the need for new or expanded dry utility infrastructure, where applicable, would be addressed through each project's environmental review process under CEQA. At a programmatic level, it is not foreseeable where such impacts may occur. However, with implementation of the CEQA process, as well as SC 4.17-4 and the 2010 General Plan Update goals and policies identified above related to energy efficiency and communication infrastructure, there would be a less than significant impact related to the need for new or expanded dry utilities.

Impact 4.17g: There would be a less than significant impact related to the need for new or expanded SCE, SCGC or communication (AT&T/Time Warner) facilities with implementation of the CEQA process for individual projects, SC 4.17-4, SCs 4.17-5 through 4.17-7, and the identified 2010 General Plan Update goals and policies. No mitigation would be required.

Solid Waste

Threshold 4.17e: Would the proposed 2010 General Plan Update be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Threshold 4.17f: Would the proposed 2010 General Plan Update comply with Federal, State, and local statutes and regulations related to solid waste?

As discussed above, the City contracts with Burrtec for private waste collection and disposal services, and solid waste generated in the City that is not diverted is primarily disposed at Mid-Valley Landfill. The City reports that in 2008, a total of 145,422 tons of solid waste from the City was disposed at Mid-Valley Landfill, representing 96 percent of the solid waste stream after diversion (e.g., recycling, reuse, composting), while 2 percent was disposed at other County landfills and 2 percent was disposed at out-of-County facilities (Ceballos 2009). Using the 2008 disposal rates for the City, as calculated by the CIWMB, the increase in solid waste disposal

(after diversion) in the City of Rancho Cucamonga with build out of the 2010 General Plan Update is summarized in Table 4.17-3.

**TABLE 4.17-3
ESTIMATED SOLID WASTE DISPOSAL WITH 2010 GENERAL PLAN
UPDATE BUILD OUT**

2008 CIWMB Disposal Rates	Growth with General Plan Build Out (2030)	Solid Waste Disposal (pounds per day)	Solid Waste Disposal (tons per year) ¹
4.5 per resident	23,900 residents	107,550	19,628
11.5 per employee	25,690 employees	295,435	53,917
Total Estimated Increase in Solid Waste Disposal		402,985	73,545
¹ This figure calculated by multiplying the pounds per day of solid waste by 365 and then dividing by 2,000.			

As shown in Table 4.17-3, based on the 2008 disposal rates, build out of the 2010 General Plan Update Study Area would result in a net increase in solid waste disposal of approximately 402,985 pounds per day (201.5 tons per day) and 73,545 tons per year. This is a conservative estimate because future disposal rates will likely be reduced from 2008 with implementation of further waste minimization efforts, as required by State law and proposed in the 2010 General Plan Update, as discussed below. Also to provide a conservative analysis, this EIR considers that all of the increased solid waste volume would be disposed at Mid-Valley Landfill. Landfills have a permitted daily throughput measured in tons per day, based on the total permitted capacity and anticipated life of the landfill. As discussed, the Mid-Valley Landfill has a permitted daily capacity of 7,500 tons per day based on an anticipated closure date of 2033. The net daily increase in solid waste disposal with build out of the 2010 General Plan Update of 201.5 tons per day would represent 2.7 percent of Mid-Valley Landfill's daily capacity. This incremental increase in solid waste disposal would not exceed Mid-Valley Landfill's permitted capacity, and there would be a less than significant impact related to solid waste disposal.

Regarding solid waste regulations, State law (AB939) requires a 50 percent diversion of solid waste from landfills. The City has achieved this diversion, as discussed above, with a 57 percent diversion rate. In addition, the City is currently meeting its target per capita disposal rates under SB 1016. The General Plan Update's Goal PF-7 and Policies PF-7.1 through PF-7.5 state the City's aim to minimize the volume of solid waste that enters regional landfills and encourage recycling. Therefore, with continuing adherence to the requirements of AB 939 and SB 1016 and implementation of the identified goal and related policies in the proposed 2010 General Plan Update, the City would maintain compliance with applicable statutes and regulations related to solid waste, and impacts would be a less than significant.

Impacts 4.17e Build out of the 2010 General Plan Update would result in an estimated net increase in solid waste disposal of 201.5 tons per day and 73,545 tons per year. This increase would represent approximately 2.7 percent of Mid-Valley Landfill's daily permitted capacity. The City of Rancho Cucamonga would continue compliance with AB 939 and SB 1016. Therefore, with continuing adherence to regulatory requirements and implementation of the identified goal and related policies in the proposed 2010 General Plan Update, the City would maintain compliance with applicable statutes and regulations related to solid waste and would not be served by a landfill with insufficient permitted capacity. There would be a less than significant impact related to solid waste.

4.17.7 CUMULATIVE IMPACTS

Future development and redevelopment within the Inland Empire would generate increased demand for utility services from various service agencies. The cumulative analysis for impacts on utility services considers the service area of the respective providers and adjacent service agencies.

Water Supply and Infrastructure

The geographic context for analysis of cumulative impacts to water supply and water treatment infrastructure is the CVWD service area. The analysis of water supply presented above is inherently cumulative because it considers the contribution of the City's growth with the proposed 2010 General Plan Update based on the CVWD's 2005 UWMP, which considers the entire service area. Similarly, the analysis of water treatment infrastructure presented above is inherently cumulative as it considers the total water treatment capacity and anticipated need for expansion in the future for CVWD's three treatment plants, which serve the CVWD service area, not just the City. Based on the analysis above, there would be less than significant cumulative impacts to water supply and infrastructure with implementation of SC 4.17-1 and identified 2010 General Plan Update goals and policies.

Wastewater Infrastructure and Treatment

As discussed above, wastewater conveyance is handled by the City and CVWD and wastewater is processed by CVWD and the IEUA. The geographic context for analysis of cumulative impacts to wastewater treatment is the service area of IEUA's RP-1 and RP-4, and the geographic context for cumulative impact to wastewater conveyance infrastructure is the City of Rancho Cucamonga. Therefore, for wastewater conveyance infrastructure, the analysis presented above is inherently cumulative as it considers growth for the City as a whole under the proposed 2010 General Plan Update. As determined above, there would be less than significant impacts related to expansion of wastewater conveyance infrastructure. Therefore, there would be a less than significant cumulative impact.

The geographic context for analysis of cumulative impacts to wastewater treatment infrastructure is the service area of IEUA's RP-1 and RP-4. As discussed above, RP-1 cannot be further expanded and, if needed, excess flows would be directed to RP-4. RP-4 has a current excess capacity of 7.9 mgd and a potential excess capacity of 21.9 mgd, if planned build out to 28 mgd is implemented. As discussed above, CVWD reports that with this expansion, if necessary, there would be more than adequate capacity to serve build out of the proposed 2010 General Plan Update. Therefore, the proposed project would not represent a cumulatively considerable contribution to increases in wastewater generation and there would be a less than significant cumulative impact.

Electricity, Natural Gas and Communication Infrastructure

SCE, SCGC, AT&T, and Time Warner are private companies that provide services on demand. Thus, no significant cumulative adverse impacts on their services are expected. Service connections to existing facilities would need to be coordinated with individual utility agencies. Additionally, all projects are required to comply with State and local regulations related to energy conservation. The proposed 2010 General Plan Update also contains goals and policies to increase energy efficiency and support emerging communication technologies. Therefore, no cumulative adverse impact related to electrical power, natural gas, or communications systems would occur.

Solid Waste

Solid waste collection services are provided on demand by private haulers. Thus, no significant cumulative adverse impacts on their services from future development and redevelopment under the proposed 2010 General Plan Update are expected. Landfill capacity is expected to decrease over time with future growth and development throughout San Bernardino County and surrounding Inland Empire areas. Waste reduction and recycling programs and regulations are expected to reduce this demand and extend the life of existing landfills. As discussed earlier, build out of the 2010 General Plan Update would result in an estimated net increase in solid waste disposal of 201.5 tons per day and 73,545 tons per year. This increase would represent approximately 2.7 percent of Mid-Valley Landfill's daily permitted capacity. This nominal incremental increase in solid waste disposal, assuming that all solid waste in the City would be disposed at Mid-Valley Landfill, would not be considered cumulative considerable. Thus, cumulative impacts on solid waste disposal facilities are expected to be less than significant.

4.17.8 MITIGATION MEASURES

No significant impacts have been identified related to water supply and infrastructure, wastewater infrastructure and treatment, dry utilities or solid waste; therefore, no mitigation is required.

4.17.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Water Supply and Infrastructure

Less Than Significant.

Wastewater Infrastructure and Treatment

Less Than Significant.

Solid Waste

Less Than Significant.

Cumulative Impacts

Less Than Significant.

SECTION 5.0 ALTERNATIVES TO THE PROPOSED PROJECT

5.1 INTRODUCTION

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines addresses the discussion of alternatives in an EIR. Key provisions of the CEQA Guidelines are identified throughout this section to explain the basis for the alternatives evaluation in this EIR. Section 15126.6(a) states:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

5.1.1 PROJECT SUMMARY

The proposed project is the comprehensive update to the City of Rancho Cucamonga's General Plan pursuant to State Planning, Zoning and Development Laws (California Government Code, Title 7, Sections 65000-66037). The current General Plan was last updated and adopted by the City in 2001. Based on the collective goals and needs of residents, business owners, stakeholders, community groups, City staff and leaders, the proposed 2010 General Plan Update has been guided by the following principles:

- Balanced Growth and Development
- Connectivity
- Neighborhood Character
- Schools
- Cultural Diversity
- Environmental Sustainability
- City Services
- Changing Housing Needs
- Economic Health
- Preservation of Special Assets

The proposed Rancho Cucamonga 2010 General Plan Update is divided into 8 Chapters: Introduction to the Rancho Cucamonga General Plan; Land Use, Community Design, and Historic Resources; Community Mobility; Economic Development; Community Services; Resource Conservation; Public Facilities and Infrastructure; and Public Health and Safety. Refer to Section 3.0, Project Description, for a complete summary of the proposed Land Use Plan and associated goals and policies for each updated General Plan Chapter.

5.1.2 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) indicates that an EIR should include “a statement of objectives sought by the proposed project.” The following are the objectives for the proposed 2010 General Plan Update as set forth by the City of Rancho Cucamonga.

The following objectives have been established by the City relative to the 2010 General Plan Update:

- Establish a planning framework that incorporates the City’s Healthy RC initiative: Healthy Mind, Body, and Earth
- Maintain well-established land use patterns for most of the City while creating new opportunities for mixed-use development at strategic locations in Rancho Cucamonga to facilitate use of transit, encourage walking as an alternative to automobile travel for short trips, and allow more people to live and shop in close proximity to their homes.
- Create opportunities for the provision of varied housing types that meet the needs of all household income levels and lifestyle choices.
- Recognize, promote, and preserve Rancho Cucamonga’s history as represented by buildings, agricultural landscapes, and unique community features.
- Enhance community mobility by implementing comprehensive and connected citywide network of streets, bikeways, and pedestrian trails; accommodating bus rapid transit along Foothill Boulevard and other location as demand dictates; and increasing use of commuter rail through land use policies.
- Move forward with initiatives that will reduce greenhouse gas emissions, including land use and mobility planning practices, programs that promote sustainable building practices, and City purchasing decisions.
- Conserve natural resources through land use regulations that respect hillside habitats and policies aimed at reducing water consumption, energy use, and refuse generation.
- Promote policies that provide for City compliance with applicable Federal and State laws.
- Provide clear direction for use of lands within the City’s sphere of influence.
- Designate lands for a variety of beneficial open space purposes: for recreation, for resource conservation, for public safety enhancement, for the managed production of resources, and for preservation of historic landscapes.

5.1.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As previously mentioned, an EIR should consider a range of feasible alternatives that would attain most of the project objectives, listed above, while reducing one or more of the significant and unavoidable impacts of the project. The significant impacts associated with the proposed 2010 General Plan Update, are summarized below:

- Conversion of farmland to other uses and cumulative loss of Important Farmland;

- Loss of regionally important mineral resources and cumulative loss of mineral resources;
- Changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics;
- Project level and cumulative increases in noise levels; and,
- Cumulative contribution to climate change.

5.1.4 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with the CEQA Guidelines Section 15126.6(a), this section summarizes the range of alternatives considered in the EIR. The following alternative has been considered and eliminated from detailed consideration for the reasons identified in Section 5.2, below.

- Alternative Site

Alternatives that are considered in detail in this EIR include:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/Existing General Plan
- Alternative 3: Alternative Land Use Plan

5.2 ALTERNATIVES ELIMINATED FROM DETAILED CONSIDERATION

Section 15126.6(c) of the CEQA Guidelines specifies that an EIR should (1) identify alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process and (2) briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are (1) failure to meet most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts.

5.2.1 ALTERNATIVE SITE

Section 15126.6(f)(2)(A) of the CEQA Guidelines indicates that, in determining the consideration of an alternative location, "The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." Section 15126.6(f)(3) of the CEQA Guidelines further states "an EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." Because the 2010 General Plan Update goals and policies are specific to, and encompass, the entirety of the City of Rancho Cucamonga and its Sphere of Influence, an alternative site where the City has no jurisdiction is not feasible. Therefore, further analysis of an alternative site in this EIR is not appropriate or required.

5.3 ALTERNATIVES CARRIED FORWARD FOR DETAILED CONSIDERATION

The analysis of each of the project alternatives identified includes the following:

- A description of the alternative.

- An analysis of environmental impacts and a comparison to the possible impacts of the proposed project. Pursuant to the CEQA Guidelines, if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.
- An assessment of the alternative's ability to meet the project objectives (previously identified in Section 5.1.2).

The comparison of impacts between each alternative and the proposed 2010 General Plan Update assumes that the general nature and types of existing Standard Conditions/Requirements (SCs), as well as proposed General Plan goals and policies and Mitigation Measures (MMs) identified in Section 5.0 of this EIR would also be applicable to each of the alternatives, where appropriate. No SCs or MMs are applied to the No Project/No Development Alternative, which basically assumes that the existing conditions in the City remain.

5.3.1 ALTERNATIVE 1: NO PROJECT/NO DEVELOPMENT ALTERNATIVE

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a "no project" alternative, to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving that project. CEQA Guidelines Section 15126.6(e)(3) describes the two general types of no project alternative: (1) when the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the no project alternative would be the continuation of that plan and (2) when the project other than a land use/regulatory plan, such as a specific development on an identifiable property, the no project alternative is the circumstance under which that project is not processed (i.e., no development). Alternative 1 represents the no project alternative assuming that no additional development would occur in the City.

Description of the Alternative

This alternative assumes that no development will occur in the City and existing land uses and environmental conditions will remain as is, indefinitely. The No Project Alternative is not feasible due to private ownership of lands in the City and the need to protect individual property rights.

Comparative Analysis of Environmental Impacts

Agricultural Resources

Alternative 1 would not result in any modifications to the agricultural uses in the City. No impacts related to the loss of agricultural resources would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Aesthetics

Alternative 1 would not result in any changes to existing developments in the City and SOI (Study Area). No impacts related to aesthetics, including new hillside development, changes to scenic resources, scenic highways, or introduction of light and glare would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Air Quality

Alternative 1 would not involve any changes to the land uses in the City and SOI or generate new sources of pollutant emissions. No impacts to air quality would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Biological Resources

Alternative 1 would have no impact on existing biological resources since no new development or redevelopment would occur in the City and SOI. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Climate Change

Alternative 1 would not involve any new development in the City or SOI and would not generate any new vehicles trips; therefore, GHG emissions would remain consistent with existing conditions. This alternative would not involve development with reduced emission factors integrated into the development nor would it incorporate the green technologies planned to accompany new development in the City. Without new development the retrofit of older, less energy structures without energy efficient technology would not be developed. Therefore, although the new trips associated with new development would not occur, the benefits associated with new development would not occur either. Both Alternative 1 and the proposed project would result in significant cumulative impacts.

Cultural Resources

Alternative 1 would avoid any future impacts to known and unknown archaeological and paleontological resources since no future development and redevelopment activities would occur in the City and SOI.

This alternative would not involve additional future development and would, therefore, not directly or indirectly impact any known historic resources through development and redevelopment activities. However, under this alternative proposed General Plan policies guiding the care and maintenance of existing historic structures would not occur, thus allowing neglect and deterioration of the City's historical resources. Therefore, implementation of the No Project/No Development alternative would not be as supportive of preservation efforts as the proposed General Plan.

Geology and Soils

There would be no grading or building activities with Alternative 1; therefore, no impact on geology and soils would occur. This impact is less than the impacts associated with implementation of the proposed 2010 General Plan Update.

Hazards and Hazardous Materials

Under Alternative 1, the risk from existing hazards including wildland fires, aircraft hazards, and hazardous materials would remain the same as existing conditions. The No Project/No Development alternative would not increase the resident population; therefore, the number of people exposed to these existing hazards would remain the same. No impacts related to hazards and hazardous materials would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Hydrology and Water Quality

Alternative 1 would not involve any changes to the hydrological conditions in the City and SOI. There would be no new sources of urban runoff or increases in stormwater pollutants; therefore, no impacts related to water quality would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Land Use and Planning

Under Alternative 1, no changes to existing land uses or land use designations would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Mineral Resources

Alternative 1 would not result in any ground disturbance in the City and SOI. No impacts related to loss of access or demand for mineral resources would occur. This alternative would decrease the impact to less than significant.

Noise

No new development would occur with Alternative 1; therefore, no new noise impacts would occur. This impact is less than the impact of the proposed 2010 General Plan Update.

Population, Housing, and Employment

Implementation of Alternative 1 would not create any new jobs, involve development of additional housing, or cause increases in the resident population; therefore, no impacts related to population, housing, and employment would occur. This impact is less than the impact of the proposed 2010 General Plan Update.

Public Services

Alternative 1 would not involve any changes to existing land uses nor would it create new demand for public services. No impact to public services would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Recreation

Alternative 1 would not create an impact on recreation since no new residential development or redevelopment, which may generate a demand for recreation, would occur in the City and SOI. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Traffic and Circulation

Alternative 1 would not involve any changes to the land uses in the City or SOI or generate additional vehicle trips. No impacts related to traffic and circulation would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Utilities and Service Systems

Alternative 1 would not involve any changes to existing land uses nor would it create new demand for utilities and service systems. No impact to utilities would occur. This impact is less than the impact of the proposed 2010 General Plan Update and less than significant.

Conclusion

Alternative 1 would result in less of an impact on most environmental issue than the proposed General Plan. Alternative 1 would also avoid the significant unavoidable impacts that would occur with implementation of the proposed project, including the conversion of farmland to other uses and cumulative loss of Important Farmland; loss of regionally important mineral resources and cumulative loss of mineral resources; changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics; cumulative increases in noise levels; and cumulative contribution to climate change. For the remaining topical issues, the proposed 2010 General Plan Update would result in less than significant impacts or potentially significant impacts that can be mitigated to a level considered less than significant.

While Alternative 1 would result in less environmental impacts than the proposed 2010 General Plan Update on most environmental issues and would not result in unavoidable impacts that would occur with the proposed General Plan, this alternative would not meet any of the project objectives identified in Section 5.1.2. This alternative would also not protect the City's historical resources.

5.3.2 ALTERNATIVE 2: NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

As discussed previously in Section 5.3.1, CEQA Guidelines Section 15126.6(e) requires than an EIR to evaluate a "no project" alternative, to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving that project. Alternative 2 represents the no project alternative that assumes continued development according to the existing General Plan.

Description of the Alternative

Because the proposed project is the revision of an existing Land Use Plan (contained in the City's General Plan), pursuant to CEQA Guidelines Section 15126.6(e)(3)(A) this No Project/Existing General Plan Alternative considers the comparative environmental impacts of the continued implementation of the existing General Plan through the year 2030, (the projected build out year of the updated General Plan). In addition, Section 15126.6(e)(2) of the CEQA Guidelines specifies that the "No Project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

This alternative assumes the existing General Plan would remain as the adopted long-range planning policy document for the City of Rancho Cucamonga, and development pursuant to the City's existing General Plan goals and policies and Land Use Policy Map would continue to occur.

Comparative Analysis of Environmental Impacts

Agricultural Resources

Similar to the proposed 2010 General Plan Update, implementation of Alternative 2 would allow for the development of land throughout the Study Area, including areas designated as Important Farmland. As with the proposed 2010 General Plan Update, Alternative 2 would result in significant and unavoidable impacts related to the conversion of farmland to other uses and the cumulative loss of Important Farmland.

Aesthetics

Alternative 2 would allow for development of the Study Area in accordance with the existing Land Use Plan in the 2001 Rancho Cucamonga General Plan. Due to the overall similarities between the existing and proposed land use plans, this Alternative would result in similar aesthetics impacts as the proposed 2010 General Plan Update. As with the proposed 2010 General Plan Update, buildout of Alternative 2 would focus on infill development and redevelopment. Development within the foothills of the San Gabriel Mountains would be limited based on the allowable development densities, which are the same under both the existing and proposed General Plans. Alternative 2 would also result in similar impacts from light and glare as with the proposed 2010 General Plan Update. The 2010 General Plan Update and Alternative 2 would each result in significant and unavoidable impacts due to changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics.

Air Quality

Alternative 2 would generate pollutant emissions from stationary and mobile sources that would accompany future development under the existing Land Use Plan. While this impact is the same as the proposed General Plan, Alternative 2 allows a different mix of land uses in the City, which is projected to result in less pollutant emissions than the proposed General Plan. The existing General Plan is also consistent with the AQMP. Thus, this alternative would have less impact on air quality than the proposed 2010 General Plan Update due to the lower potential for pollutant emissions.

Biological Resources

Alternative 2 would allow for development of the Study Area in accordance with the existing Land Use Plan in the 2001 Rancho Cucamonga General Plan. Due to the overall similarities between the existing and proposed land use plans, this Alternative would result in similar impacts to biological resources as the proposed 2010 General Plan Update. The 2010 General Plan Update and Alternative 2 would each result in less than significant impacts related to biological resources.

Climate Change

Alternative 2 would generate greenhouse gases from future development and redevelopment in the City and SOI, similar to the proposed General Plan. This alternative would not involve development with reduced emission factors integrated into the development nor would it incorporate the green technologies planned to accompany new development in the City. Without new development the retrofit of older, less energy structures without energy efficient technology would not be developed. Therefore, although the new trips associated with new development would not occur, the benefits associated with new development would not occur either. With implementation of the proposed mitigation measures, impacts associated with the existing and

proposed General Plans are anticipated to be the very similar, with significant and unavoidable cumulative impacts related to climate change.

Cultural Resources

As with the proposed 2010 General Plan Update, Alternative 2 would allow for continued development throughout the City and SOI. Potential impacts to historic resources would be similar to the proposed 2010 General Plan Update; however, under this alternative, the proposed General Plan policies would not necessarily be implemented, thus allowing for neglect and deterioration of historic resources rather than promoting preservation and rehabilitation. Therefore, implementation of the No Project/Existing General Plan alternative might not be as supportive of preservation efforts as the proposed 2010 General Plan Update.

Alternative 2 would set aside a slightly larger amount of conservation area (1,348 acres under Alternative 2 versus 1,336 acres under the proposed 2010 General Plan Update) that would not be subject to grading or development. Therefore, approximately 12 additional acres would be preserved and set aside for conservation. This slight reduction in conservation area would mean greater potential for disturbance of known and unknown cultural resources. However, Alternative 2 would be subject to the same standard conditions and mitigation measures regarding archaeological and paleontological resources as with the proposed 2010 General Plan Update, and potential impacts would be reduced to less than significant levels.

Geology and Soils

Implementation of Alternative 2 would involve development throughout the Study Area, similar to the proposed 2010 General Plan Update. As with the proposed 2010 General Plan Update, any grading activities would be compliant with existing Federal, State, and local regulations. As with the proposed 2010 General Plan Update, impacts related to geology and soils for Alternative 2 would be less than significant. While slightly less area would be disturbed under Alternative 2, impacts related to geology and soils would be the same as those of the proposed General Plan.

Hazards and Hazardous Materials

Impacts associated with hazards for Alternative 2 would be slightly less to those associated with the proposed 2010 General Plan Update. As stated in Table 3-2, the number of residents at risk from wildland fires, aircraft hazards, or exposure to hazardous materials under Alternative 2 would be less than the those potentially at risk under the proposed 2010 General Plan Update due to the difference in projected population at buildout for Alternative 2 and the 2010 General Plan Update. However, as with the proposed 2010 General Plan Update, impacts associated with hazards and hazardous materials would be less than significant due to compliance with applicable regulations.

Hydrology and Water Quality

Implementation of Alternative 2 would result in changes in hydrology and water quality due to future development. While slightly less area would be disturbed under this alternative, than the proposed General Plan, implementation of the standard conditions would avoid downstream and off-site impacts and would reduce stormwater pollutants from development. As with the proposed 2010 General Plan Update, impacts associated with hydrology and water quality would be less than significant.

Land Use and Planning

Alternative 2 includes a different mix of land uses in the City at buildout than the proposed General Plan. Less residential development and more commercial and industrial uses are proposed under this alternative. This difference does not change the level of impact between Alternative 2 and the proposed General Plan and impacts would be less than significant.

Mineral Resources

Implementation of Alternative 2 would involve development throughout the Study Area, similar to the proposed 2010 General Plan Update. Impacts to mineral resources, including a significant and unavoidable cumulative impact related to the loss of mineral resources, would be the same as the proposed 2010 General Plan Update.

Noise

Buildout of Alternative 2 would result in fewer residents in the City that would be exposed to traffic noise levels along major roadways. Therefore, noise impacts are expected to be less than those evaluated for the proposed 2010 General Plan Update. However, under both scenarios, cumulative noise impacts would be significant and unavoidable due to existing noise levels that exceed City standards.

Population, Housing, and Employment

Implementation of Alternative 2 would result in buildout according to the 2001 General Plan which would result in the development of fewer housing units but more commercial and industrial floor area when compared to the proposed 2010 General Plan Update. As with the proposed 2010 General Plan Update, impacts on population, housing and employment would be less than significant.

Public Services

Alternative 2 would generate additional demand for public services; however this demand would be less than those anticipated for the proposed 2010 General Plan Update due to the smaller buildout population. Despite the reduced demand, both Alternative 2 and the proposed 2010 General Plan Update would result in less than significant impacts related to public services.

Recreation

Alternative 2 would have less impact on recreation since buildout under the existing General Plan would result in a lower resident population in the City than the proposed General Plan. This impact is less than the impact of the proposed 2010 General Plan Update.

Traffic and Circulation

Buildout of Alternative 2 would result in more vehicle trips than under the proposed 2010 General Plan Update due the greater amount of non-residential development capacity. Therefore, traffic-related impacts are expected to be greater than those evaluated for the proposed 2010 General Plan Update. However, under both scenarios, traffic impacts would be less than significant.

Utilities and Service Systems

Alternative 2 would generate additional demand for utility services; however this demand would be less than those anticipated for the proposed 2010 General Plan Update due to the smaller buildout population. Despite the reduced demand, both Alternative 2 and the proposed 2010 General Plan Update would result in less than significant impacts related to public services.

Conclusion

Continued implementation of Alternative 2 would create significant and unavoidable adverse impacts, including the conversion of farmland to other uses and cumulative loss of Important Farmland; loss of regionally important mineral resources and cumulative loss of mineral resources; changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics; direct and cumulative impacts related to long-term regional emissions of PM₁₀ and PM_{2.5}; cumulative increases in noise levels; and cumulative contribution to climate change. For the remaining topical issues, the proposed 2010 General Plan Update would result in less than significant impacts or potentially significant impacts that can be mitigated to a level considered less than significant.

Alternative 2 would result in less environmental impacts related to air quality, hazards and hazardous materials, noise, public services and utilities than what would occur with implementation of the proposed project. This alternative would have the same impacts on agricultural resources, aesthetics, hydrology and water quality, geology and soils, land use and planning, mineral resources and population, housing, and employment. On the other hand, the existing General Plan does not contain goals and policies for reducing greenhouse gases and for preserving historical resources. Traffic impacts would also be greater.

Alternative 2 would result in lower environmental impacts than the proposed 2010 General Plan Update on some environmental issues. It would also meet most of the objectives of the City as outlined in Section 5.1.2. However, this alternative would not protect the City's historical resources and does not include goals and policies for sustainability and energy conservation that would reduce greenhouse gas emissions from future development and redevelopment.

5.3.3 ALTERNATIVE 3: ALTERNATIVE LAND USE PLAN

Description of the Alternative

Alternative 3 assumes that an alternate Land Use Plan will be adopted as part of the proposed 2010 General Plan Update. Specifically, this alternative proposes a land use plan that would reduce some of the significant and unavoidable impacts associated with the proposed General Plan. Alternative 3 includes a land use plan that calls for the preservation of existing agricultural areas and vineyards in the City, preventing the loss of Important Farmland. This alternative also calls for no development in areas identified to contain regionally significant mineral resources (along Cucamonga Creek, Day Creek, Deer Creek and San Sevaine Wash). To prevent changes in the visual quality of the hillsides and the preservation of scenic resources in the City, this alternative would redesignate Hillside Residential to Open Space, thus limiting development within the hillside areas to no more than one dwelling unit per 40 acres pursuant to the City's Development Code.

Comparative Analysis of Environmental Impacts

Agricultural Resources

Alternative 3 would not result in any modifications to the agricultural uses in the City. No unavoidable impacts related to the loss of Important Farmland would occur. This impact is less than the impact of the proposed 2010 General Plan Update.

Aesthetics

Alternative 3 would reduce development in the hillside areas of the City, better preserving the undeveloped visual quality of the hillsides and protecting scenic vistas in the City. This will reduce unavoidable direct and cumulative impacts on aesthetics. However, infill development and redevelopment in the rest of the City will still occur, resulting in the introduction of new sources of light and glare. This impact is less significant and less than the impact of the proposed 2010 General Plan Update.

Air Quality

Alternative 3 would prevent development in existing agricultural areas and areas with regionally significant mineral resources and reduce allowable development in the hillside areas. Thus, less development would occur in the City and SOI at buildout. This translates to less pollutant emissions and fewer residents. This impact is less than significant and less than the impact of the proposed 2010 General Plan Update.

Biological Resources

Alternative 3 would have less impact on biological resources in the hillside areas since the allowable development density would be reduced to one dwelling unit per 40 acres for the all hillside areas. With more areas remaining undeveloped, this alternative would have less impact than the proposed 2010 General Plan Update.

Climate Change

With less development capacity than the proposed General Plan, less greenhouse gas emissions would be generated at buildout of this alternative. This alternative also assumes that the goals and policies for sustainability and energy conservation would be adopted by the City, resulting in a lower contribution to global climate change.

Cultural Resources

With future development in the hillsides reduced, impacts to known and unknown archaeological and paleontological resources would be less under Alternative 3 than the proposed General Plan. This alternative also assumes that the goals and policies for historic resource preservation would be adopted by the City, resulting in less impact on cultural resources than the proposed General Plan.

Geology and Soils

With no new development in existing agricultural areas and areas with regionally significant mineral resources and with reduced development in the hillside areas, impacts related to geology and soils would also be less. This impact is less than the impact of the proposed 2010 General Plan Update.

Hazards and Hazardous Materials

The revised Land Use Plan for this alternative would not allow new development in agricultural areas, some of which are currently designated as Industrial Park and General Industrial. Thus, a lower potential for increased hazardous material users would result in the City. Also, reduced development density in the hillside areas would reduce exposure to wildland fire hazards in this area. This impact is less than the impact of the proposed 2010 General Plan Update.

Hydrology and Water Quality

With future development in the hillsides reduced and no new development in agricultural areas and areas with regionally significant mineral resources, changes in existing hydrology patterns and storm water pollutant sources would be less. This alternative assumes that future development would comply with standard conditions for hydrology and water quality and impacts would be less than significant, similar to the proposed General Plan.

Land Use and Planning

Alternative 3 proposes a different mix of land uses in the City at buildout than the proposed General Plan. Less residential and industrial development would occur under this alternative due to no new development in agricultural areas and areas with regionally significant mineral resources and reduce development in hillside areas. This difference does not change the level of impact between Alternative 3 and the proposed General Plan and impacts would be less than significant.

Mineral Resources

Alternative 3 has been specifically designed to reduce unavoidable adverse impacts to regionally significant mineral resources. With no development allowed in and near the creeks that contain mineral resources, no significant impacts on mineral resources would occur under this alternative. This impact is less than the impact of the proposed 2010 General Plan Update.

Noise

This alternative would reduce residential development in the City, resulting in fewer residents at buildout (noise sensitive receptors) that may be exposed to traffic, railroad, airport, and stationary noise sources in the project area. This impact is less than the impact of the proposed 2010 General Plan Update.

Population, Housing, and Employment

With no new development in agricultural areas and areas with regionally significant mineral resources and reduced residential development in the hillside areas, a decrease in the buildout population of the City could be expected under this alternative. Even with reduced housing capacity, future housing allocations under RHNA could still be met under this alternative. As with the proposed 2010 General Plan Update, impacts on population, housing and employment would be less than significant.

Public Services

Alternative 3 would generate additional demand for public services; however this demand would be less than the demands anticipated for the proposed 2010 General Plan Update due to the smaller buildout population. Despite the reduced demand, both Alternative 3 and the proposed

2010 General Plan Update would result in less than significant impacts related to public services.

Recreation

Alternative 3 would have less impact on recreation since buildout under the existing General Plan would result in a lower resident population in the City than the proposed General Plan. This impact is less than the impact of the proposed 2010 General Plan Update.

Traffic and Circulation

With less development capacity than the proposed General Plan, less vehicle trips would be generated at buildout of this alternative. This impact is less than the impact of the proposed 2010 General Plan Update.

Utilities and Service Systems

Alternative 3 would generate additional demand for utility services; however this demand would be less than those anticipated for the proposed 2010 General Plan Update due to the smaller buildout population. Despite the reduced demand, both Alternative 3 and the proposed 2010 General Plan Update would result in less than significant impacts related to public services.

Conclusion

Implementation of Alternative 3 would avoid the significant and unavoidable adverse impacts related to the conversion of farmland to other uses and cumulative loss of Important Farmland; the loss of regionally important mineral resources and cumulative loss of mineral resources; changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics. In addition, the decrease in residential development and buildout population would reduce exposure to cumulative increases in noise levels, as well as reduce greenhouse gas emissions and its cumulative contribution to climate change.

Alternative 3 would result in lower environmental impacts than the proposed General Plan on most environmental issues and would avoid and reduce the significant and unavoidable adverse impacts from the proposed General Plan. Since this alternative would include adoption of the goals and policies of the proposed General Plan and would comply with the standard conditions and mitigation measures called out in Section 4.0, it would generally meet the objectives of the proposed General Plan. However, the alternative Land Use Plan does not represent the mix of land uses and development that the residents, stakeholders, City staff and leaders envisioned at buildout of the City and SOI. It may also not provide the housing opportunities to meet demand and lifestyle choices. Thus, it does not respond to the objectives of the City for the 2010 General Plan Update to the same degree as the proposed General Plan.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The environmental analysis of alternatives above indicates that, through a comparison of potential impacts from each of the alternatives and the proposed General Plan, the No Project/No Development alternative could be considered superior because no new

environmental impacts would be introduced to the City and its SOI. However, this alternative would not meet any of the objectives for the comprehensive update of the General Plan and would not incorporate new goals and policies to address historic resource preservation and sustainability.

Aside from the No Project/No Development Alternative, Alternative 3 or the Alternative Land Use Plan would also be considered environmentally superior. This alternative would result in less residential development in the hillside areas of the City and no new development on agricultural areas and areas with regionally significant mineral resources. This will avoid significant and unavoidable impacts related to the conversion of farmland to other uses and cumulative loss of Important Farmland; the loss of regionally important mineral resources and cumulative loss of mineral resources; and changes in the visual quality of the hillsides and scenic vistas and cumulative changes to aesthetics. Alternative 3 represents the environmentally superior alternative because three of the significant and unavoidable impacts associated with the proposed 2010 General Plan Update would be avoided by this alternative. In addition, it would also reduce impacts related to the other unavoidable impacts related to inconsistency with the Air Quality Management Plan for the South Coast Air Basin; cumulative increases in noise levels; and cumulative contribution to climate change. However, Alternative 3 would not completely avoid or reduce these impacts to less than significant levels.

As discussed earlier, the alternative Land Use Plan does not represent the mix of land uses and development that the residents, stakeholders, City staff and leaders envisioned at buildout of the City and SOI. It may also not provide the housing opportunities to meet demand and lifestyle choices. Thus, it does not respond to the objectives of the City for the 2010 General Plan Update to the same degree as the proposed General Plan. Additionally, due to private ownership within the hillside areas, Alternative 3 would decrease development rights on existing properties thus conflicting with private ownership rights and making the alternative less desirable than the 2010 General Plan Update.

SECTION 6.0 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

6.1 ANY SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The environmental impacts associated with the proposed 2010 General Plan Update are discussed in Sections 4.1 through 4.17 of this EIR. Buildout of the proposed 2010 General Plan Update would result in potentially significant impacts prior to implementation of mitigation measures (MM) for the following topical issues:

- Aesthetics (Scenic Vistas, Visual Character and Quality, and Cumulative Impacts),
- Agriculture and Forest Resources (Farmland Resources and Cumulative Impacts),
- Air Quality (Air Quality Standards Violation and Exposure of Sensitive Resources, and Cumulative Air Quality Impacts),
- Climate Change (Greenhouse Gas Emissions and Cumulative Impacts),
- Cultural Resources (Historical Resources, Archaeological Resources, Paleontological Resources, and Cumulative Impacts),
- Hazards and Hazardous Materials (Wildland Fires),
- Hydrology and Water Quality (Water Quality and Waste Discharge, Drainage and Erosion, Surface Runoff, and Water Quality),
- Mineral Resources (Regionally Important Mineral Resources and Cumulative Impacts), and
- Noise (Noise Levels and Vibration, Airport and Airstrip Noise, and Cumulative Impacts).

As currently proposed, implementation of proposed 2010 General Plan Update would result in the following significant impacts after implementation of the mitigation program and would require adoption of a Statement of Overriding Considerations:

- Aesthetics (Scenic Vistas, Visual Character and Quality, and Cumulative Impacts),
- Agriculture and Forest Resources (Farmland Resources and Cumulative Impacts),
- Air Quality (Air Quality Standards Violation and Exposure of Sensitive Resources, and Cumulative Air Quality Impacts),
- Climate Change (Greenhouse Gas Emissions and Cumulative Impacts), and
- Mineral Resources (Regionally Important Mineral Resources and Cumulative Impacts).

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The environmental effects related to the implementation of the project are discussed in Sections 4.1 through 4.17 of this EIR. Implementation of the project would require the long-term commitment of natural resources and land. Development of the project would result in the commitment of land resources for residential, commercial, mixed use, office, industrial, and transportation uses, as well as new utilities and extensions of existing utilities.

Construction and long-term operation of the project would require the commitment and reduction of nonrenewable and slowly renewable resources, including: petroleum fuels and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures) and lumber, sand/gravel, steel, copper, lead, and other metals (for use in building construction, piping, and roadway infrastructure). Other resources that are slow to renew and/or recover from environmental stressors would also be impacted by project implementation (e.g., air quality through the combustion of fossil fuels and production of greenhouse gases, water supply through the increased potable water demands for drinking, cooking, cleaning, landscaping, and general maintenance needs).

6.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed 2010 General Plan Update could foster economic or population growth or the construction of additional development, either directly or indirectly, in the surrounding environment. To address this issue, potential growth-inducing effects are examined through analysis of the following questions:

1. Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?
2. Would this project result in the need to expand one or more public services to maintain desired levels of service?
3. Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
4. Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

It should be noted that growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of implementing proposed 2010 General Plan Update.

- 1. *Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?*** As discussed in Section 3.0, Project Description, and Section 4.17, Utilities and Service Systems, the proposed 2010 General Plan Update would involve buildout of the City of Rancho Cucamonga to the established development capacity. Since the City is largely built out, most of the roadway and utility infrastructure systems are in place and would not require extension to serve future development and redevelopment under the 2010 General Plan

Update. No growth-inducing impact related to the extension of infrastructure is expected with the 2010 General Plan Update.

As discussed in Section 3.0, the Land Use Plan that is proposed as part of the 2010 General Plan Update includes changes in existing land use designations on a number of areas in the City, promoting the redevelopment of these areas to mixed use developments. Thus, the proposed 2010 General Plan Update seeks to induce growth in the City by encouraging the future development and redevelopment of specific areas into more desirable land uses. The impacts associated with the future development of vacant lots and the redevelopment of existing land uses to different land uses is analyzed in Section 4.0 of this EIR. As summarized above, significant adverse impacts would be avoided or reduced through compliance with the goals and policies in the 2010 General Plan Update, standard conditions, and required mitigation measures. Significant unavoidable adverse impacts would remain for:

- Aesthetics (Scenic Vistas, Visual Character and Quality, and Cumulative Impacts),
- Agriculture and Forest Resources (Farmland Resources and Cumulative Impacts),
- Air Quality (Air Quality Standards Violation and Exposure of Sensitive Resources, and Cumulative Air Quality Impacts),
- Climate Change (Greenhouse Gas Emissions and Cumulative Impacts), and
- Mineral Resources (Regionally Important Mineral Resources and Cumulative Impacts).

2. Would this project result in the need to expand one or more public services to maintain desired levels of service? As discussed in Section 4.14, Public Services, an increased demand for public services would occur with future development and redevelopment under the 2010 General Plan Update. One of the public service agencies consulted during the preparation of this EIR indicated that this project would necessitate the immediate expansion of their existing resources in order to maintain desired levels of service. In the event that their facilities do need to be expanded, funding mechanisms are in place through existing regulations and standard practices to accommodate such growth. This project would not, therefore, have significant growth-inducing consequences with respect to public services.

The Rancho Cucamonga Fire District may require additional personnel and resources are needed to serve future developments in the City. Additionally, the proposed 2010 General Plan Update identifies a new, planned fire station; however, construction of this new facility would be addressed in separate documentation required pursuant to CEQA.

The San Bernardino County Sheriff's Department has indicated that additional sworn and non-sworn officers are needed to serve future development. As discussed in Section 4.14, Public Services, there is available capacity to accommodate student generation related to future development in the City, and no additional facilities would be required to serve the Target Density. The Rancho Cucamonga Library has indicated that future development in the City would create additional demand for library services, requiring additional resources; however, it is not expected that the development of any new facilities would be needed.

Since no specific development or redevelopment would accompany the proposed 2010 General Plan Update and future development and redevelopment would occur according to property owner discretion and entitlement by the City, demand for public services would increase incrementally as specific projects are constructed. The planned fire station and

SBSD substation will respond to both current and future anticipated demand consistent with projected City needs and no new schools, libraries, or other public facilities are proposed as part of the proposed 2010 General Plan Update. Rather, the proposed 2010 General Plan Update contains goals and policies that call for the provision of adequate public services to existing and future developments in the City. These services would serve demand, rather than induce growth. Therefore, the proposed 2010 General Plan Update for the City of Rancho Cucamonga would not have significant growth-inducing consequences with respect to public services.

- 3. *Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?*** The proposed 2010 General Plan Update includes an Economic Development Chapter that seeks to maintain the economic stability of the City by retaining existing businesses; attracting new businesses and economic opportunities; and facilitating growth of local businesses. The goals and policies of this Element will not directly result in economic effects nor lead to economic activities that may affect the environment. Rather, it is through projected future development consistent with the proposed 2010 General Plan Update that the goals of the Economic Development Chapter for business retention and development would be achieved. Also, the policies would serve as guidance in the City's decision-making process and daily operations, but would not generate activities that may significantly affect the environment.

The indirect effects associated with future development include the creation of short-term construction jobs and long-term jobs and the increase in the resident population of the City. These would generate additional demands for commercial goods and services in the project area, which would present business opportunities for new shopping, entertainment, employment, home improvement, maintenance and other non-residential developments. This would, in turn, encourage new businesses and/or the expansion of existing businesses that address these economic needs. The proposed Land Use Plan in the proposed 2010 General Plan Update would accommodate commercial and industrial developments to meet this demand. The analysis in this PEIR includes the potential environmental impacts of development that may occur under the proposed Land Use Plan.

Existing and future commercial and industrial uses near the City are expected to meet the demand for goods and services generated by future residents and employees in the City. These developments would be subject to review and approval by the agency with jurisdiction over the site and would include the necessary environmental clearance in accordance with the California Environmental Quality Act. Environmental review for individual projects would ensure that potentially significant adverse impacts are identified and mitigated, in accordance with the California Environmental Quality Act. Public utility and service providers would also need to determine if the additional growth associated with individual projects can be accommodated by existing or planned infrastructure improvements and public services and utility agencies' capabilities to provide services. This review and approval of individual developments by public agencies and service providers would ensure that adequate services and infrastructure are available to serve future developments and that no land use conflicts are created. Mitigation measures, standard conditions, and conditions of approval imposed on development projects in the area are expected to avoid or reduce environmental impacts, which may be indirectly attributed to the proposed 2010 General Plan Update or future development under the proposed 2010 General Plan Update. Thus, the growth-inducing impacts of the proposed 2010 General Plan Update are not expected to result in significant adverse effects to the environment.

- 4. Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?** The proposed Land Use Plan seeks to accommodate limited growth in the City by encouraging the future development and redevelopment of specific areas into more desirable and compatible land uses. While a number of policies in the proposed 2010 General Plan Update call for revisions or additional regulations, these regulations are expected to reduce the environmental impacts of future development and redevelopment, or to ensure that adequate housing, infrastructure, and public services are provided to meet demands and needs at buildout of the City. Mitigation measures have been identified in Section 4.0 to ensure that the impacts of future development and redevelopment are further reduced or avoided, after compliance with the standard conditions.

Compared to the 2001 General Plan Land Use Plan, the modifications to land uses proposed 2010 General Plan Update are minor in nature and are reflective of the development trends that have occurred over the past 15 to 20-year period. Therefore, the proposed 2010 General Plan Update would not involve a precedent-setting action which could encourage and facilitate other activities that could significantly affect the environment.

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Appendix A
Notice of Preparation (NOP) and
NOP Comment Letters

NOTICE OF PREPARATION

City of Rancho Cucamonga

CITY OF RANCHO CUCAMONGA

NOTICE OF PREPARATION

To: Distribution List

Date: November 12, 2009

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Rancho Cucamonga General Plan Update Project

Lead Agency:

CITY OF RANCHO CUCAMONGA
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730
(909) 477-2750
(909) 477-2847 FAX
Contact: Corkran W. Nicholson, Assistant Planning Director
Email: Corky.Nicholson@cityofrc.us

Consulting Firm Preparing the Draft EIR:

BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, California 92626
(714) 444-9199
Contact: Jennifer Marks, Project Manager

The **CITY OF RANCHO CUCAMONGA** will be the Lead Agency and is preparing an Environmental Impact Report (EIR) for the project identified below. The EIR will be prepared to evaluate the potential environmental impacts associated with the Rancho Cucamonga General Plan Update project. The EIR will be prepared in conformance with the California Environmental Quality Act (CEQA) (*Public Resources Code* [PRC] §21000 et seq.) and the CEQA Guidelines (Title 14, *California Code of Regulations* [CCR], Chapter 3, §15000 et seq.). We are requesting comments as to the scope and content of the environmental information that should be included in the EIR. If you represent a government agency, we are particularly interested in information germane to your statutory responsibilities. If you are a government agency, you may need to use the EIR prepared by our agency when considering your permit or other approval for the project.

This Notice of Preparation contains a brief project description and identifies the environmental issues to be examined in the EIR. A copy of the Initial Study (is is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but **not later than 30 days** after receipt of this notice.

Please send your response to **Mr. Corkran W. Nicholson**, at the address shown above. Please include the name, phone number, and address of a contact person in your response.

Project Title: Rancho Cucamonga General Plan Update

Project Applicant: CITY OF RANCHO CUCAMONGA
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730
(909) 477-2750

Project Location: The City of Rancho Cucamonga is located in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south and east, including the Cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the east. The northernmost portion of the City's Sphere of Influence is adjacent to the San Bernardino National Forest. The

NOTICE OF PREPARATION

City of Rancho Cucamonga

project location is shown on Exhibit 1, Project Location, and an aerial image of the City is shown on Exhibit 2, Aerial Photograph.

Interstate and regional access to the City is provided by Interstate 15 (I-15), which runs in a general north-south direction and bisects the eastern portion of the City, and by State Route 210 (SR-210), an east-west freeway which runs through the center of the City. The Interstate 10 (I-10) freeway also provides regional access and is located approximately 0.75 mile south of the City boundary.

Project Description: Each city and county in California must prepare a comprehensive, long-term general plan to guide its future. California state law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning” (*California Government Code*, §65300). A general plan expresses the community’s development goals and embodies public policies relative to the distribution of future land uses, both public and private. The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City.

The proposed General Plan Update will address six of the seven State-mandated General Plan elements and other issues that are important to the community. The proposed General Plan Update contains the following elements (referred to as “Chapters”):

Managing Land Use, Community Design, Historic Resources, and Public Art
Community Mobility
Economic Development
Community Services
Resource Conservation
Public Facilities and Infrastructure
Public Health and Safety

Summaries of the content and purpose of each of the chapters are provided below. The City is currently updating its General Plan Housing Element; however, this update is independent of this General Plan Update process.

Managing Land Use, Community Design, Historic Resources, and Public Art

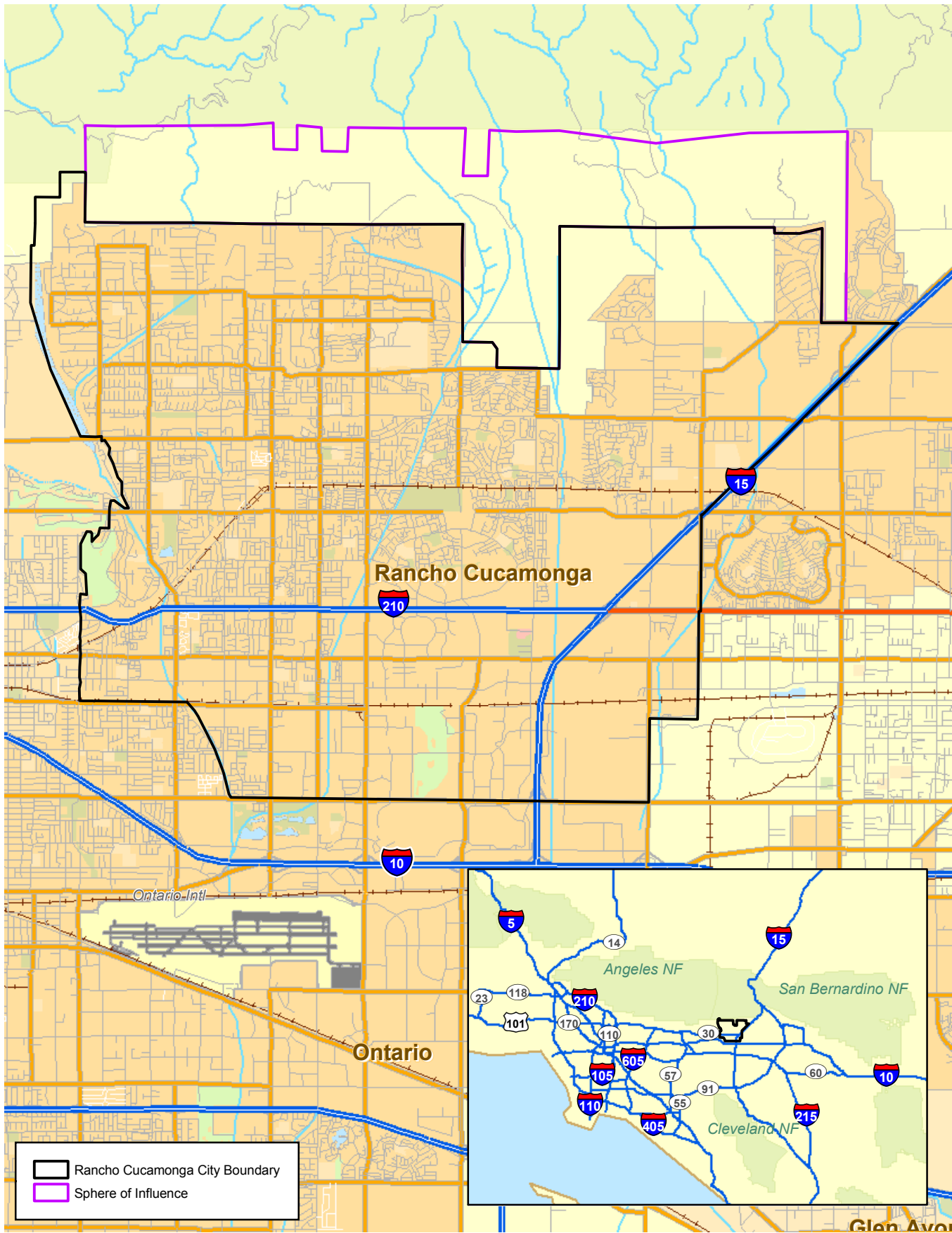
The Managing Land Use, Community Design, Historic Resources, and Public Art Chapter defines the distribution and location of land uses to achieve economic efficiency, balance of aesthetic appeal and functionality, and preservation of historical resources in an effort to enhance the overall quality of community life.



The General Plan Update identifies 21 land use designations that are divided into nine categories, including residential, commercial, mixed-use, industrial, public facilities, schools, parks, open space and conservation, and vacant lands. The land use designations are shown on Exhibit 3, Draft General Plan Land Uses.

Residential Designations

Six residential land use designations allow for a variety of densities, including preservation of existing neighborhoods and creation of opportunities for new housing types. While these designations primarily allow for residential development, other allowable land uses include parks, trails, special residential uses addressed by State law, child care facilities, schools, and places of religious assembly. Proposed residential density ranges are as follows:

- Very Low Residential (0.10–2.0 dwelling units per acre);
- Low Residential (2.0–4.0 dwelling units per acre);
- Low Medium Residential (4.0–8.0 dwelling units per acre);

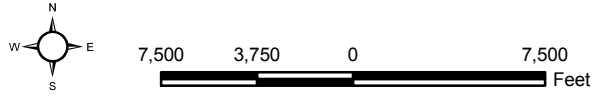


	Rancho Cucamonga City Boundary
	Sphere of Influence

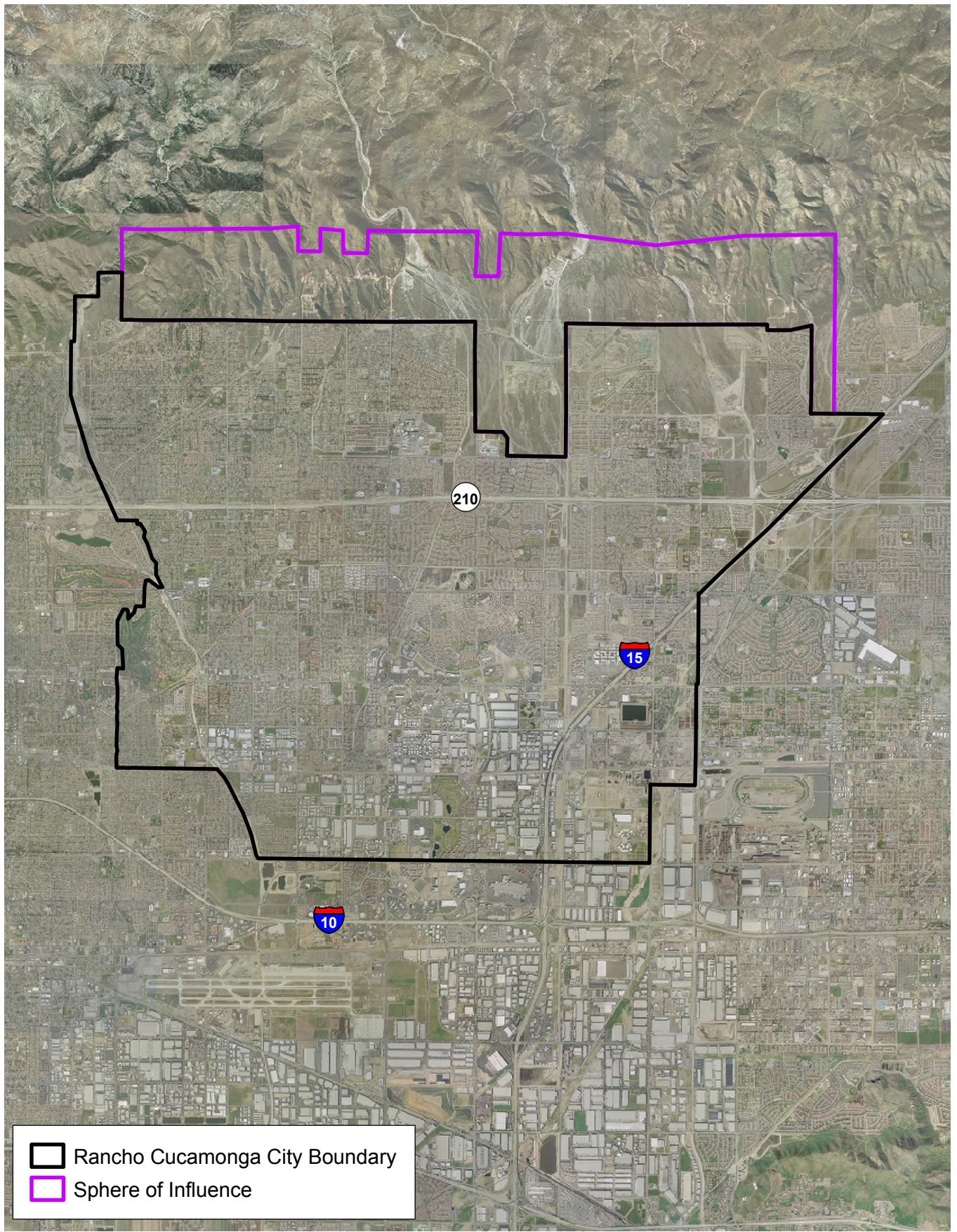
Project Location

Exhibit 1

Rancho Cucamonga General Plan Update NOP



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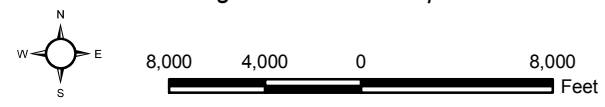
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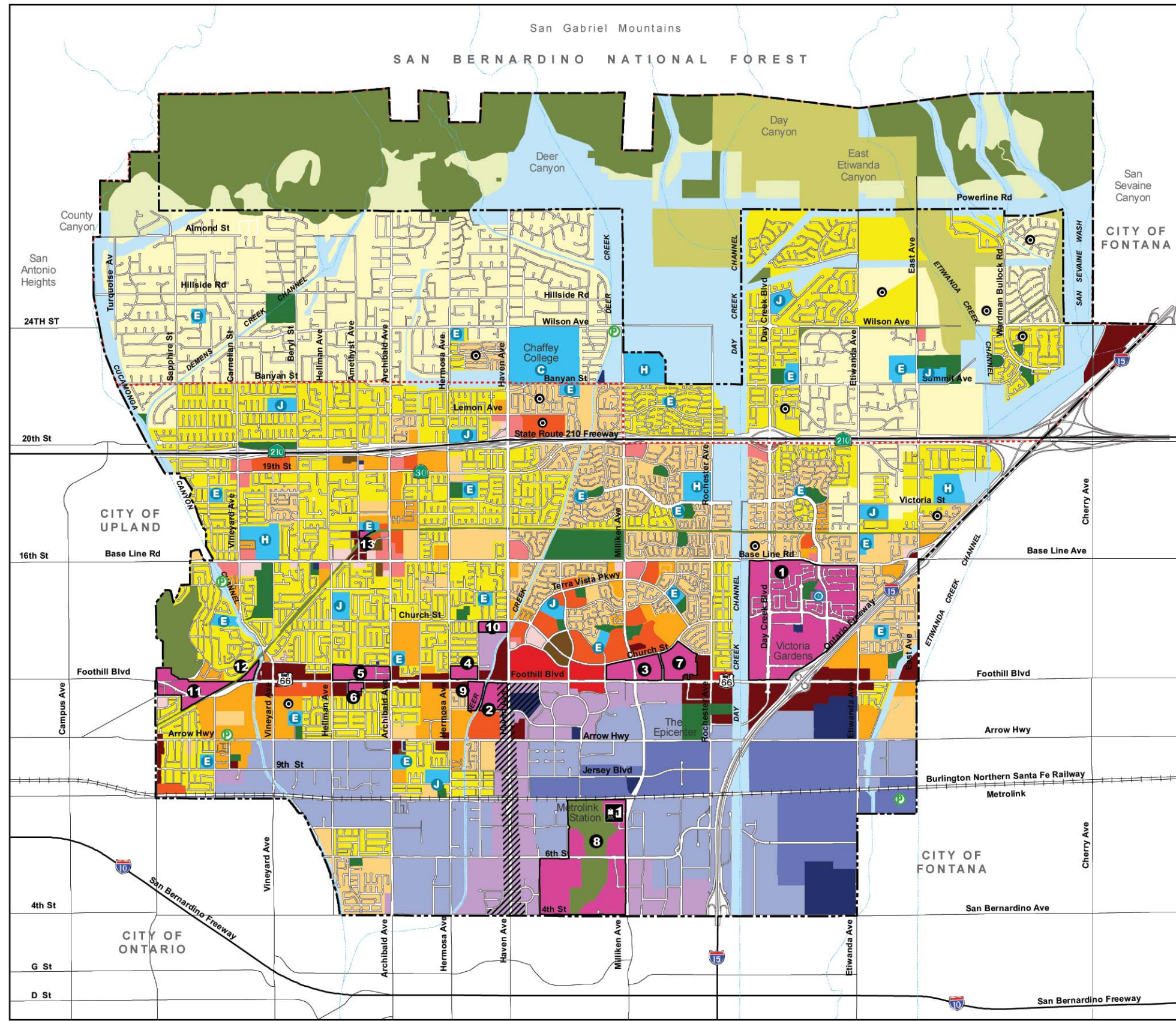
Rancho Cucamonga City Boundary
 Sphere of Influence

Aerial Photograph

Exhibit 2

Rancho Cucamonga General Plan Update NOP





Draft General Plan (2009)

Residential

- Very Low (Less than 2 du/ac)
- Low (2 to 4 du/ac)
- Low Medium (4 to 8 du/ac)
- Medium (8 to 14 du/ac)
- Medium High (14 to 24 du/ac)
- High (24 to 30 du/ac)

Commercial

- Office (Max. 1.00 FAR)
- Neighborhood Commercial (Max 0.35 FAR)
- Community Commercial (Max. 0.35 FAR)
- General Commercial (Max. 0.35 FAR)

Mixed Use

- Mixed Use (Max. 1.00 FAR)

Industrial

- Industrial Park (Max. 0.60 FAR)
- General Industrial (Max. 0.60 FAR)
- Heavy Industrial (Max. 0.50 FAR)

Open Space

- Hillside Residential (0.1 to 2 du/ac)
- Conservation
- Open Space (0 to 0.1 du/ac)
- Flood Control/Utility Corridor

Public Facility

- Civic/Regional (Max. 1.0 FAR)
- Schools (Max. 0.20 FAR)
- Parks

Schools and Parks

- E Elementary School
- J Junior High School
- H High School
- C College
- Proposed Elementary School
- Proposed Park

Mixed Use Areas

1. Victoria Gardens
2. Town Center at Haven and Foothill
3. Terra Vista
4. Foothill at Hermosa and Center
5. Foothill at Archibald and Hellman
6. Foothill at Helms and Hampshire
7. Foothill at Church and Mayten
8. Empire Lakes
9. Foothill at Deer Creek Channel
10. Haven and Church
11. Bear Gulch
12. Foothill at Cucamonga Channel
13. Alta Loma

Overlays

- Haven Avenue Office Overlay
- Equestrian/Rural Area Overlay
- Master Plan Overlay

- Rancho Cucamonga City Boundary
- Sphere of Influence

Notes: 1. Location of proposed parks and schools are not fixed, and may be adjusted to accommodate future planning needs.

Source: Rancho Cucamonga and San Bernardino County Assessor, 2009.



Source: Hogle Ireland 2009

Draft General Plan Land Use Plan

Rancho Cucamonga General Plan Update NOP

Exhibit 3



R:/Projects/Hogle/J007/graphics/NOP/ex3_GLUP.pdf

D:/Projects/Hogle/J007/graphics/ex_GLUP.ai

NOTICE OF PREPARATION

City of Rancho Cucamonga

- Medium Residential (8.0–14.0 dwelling units per acre);
- Medium High Residential (14.0–24.0 dwelling units per acre); and
- High Residential (24.0–30.0 dwelling units per acre).

Commercial Designations

Four commercial designations establish opportunities for varied commercial business enterprises to serve local residents and visitors. Commercial densities are expressed as a probable range of floor area ratio, or FAR¹, and include:

- Office (0.4-1.0 FAR);
- Neighborhood Commercial (0.25-0.35 FAR);
- General Commercial (0.25-0.35 FAR); and
- Community Commercial (0.25-0.35 FAR).

Mixed-Use Designation

The Mixed-Use designation allows for opportunities for intensely developed districts to combine complementary commercial, office, residential, commercial recreation, and community uses in areas with easy access to transit. In combination with a number of criteria outlined in the proposed General Plan Update, the Mixed-Use designation allows for a density range of 8.0 to 30.0 dwelling units per acre. The proposed General Plan Update identifies special development requirements for the following development areas:

- Regional Center
- Terra Vista Town Center (northeast corner of Haven Avenue and Foothill Boulevard)
- Rancho Cucamonga Town Square (southwest corner of Haven Avenue and Foothill Boulevard);
- Terra Vista along Milliken Avenue and Foothill Boulevard;
- Foothill Boulevard (north side) between Hermosa Avenue and Center Avenue;
- Foothill Boulevard (north side) at Archibald Avenue and Hellman Avenue;
- Foothill Boulevard between Helms Avenue, Hampshire Street, and Malachite Avenue;
- Foothill Boulevard at Church Street and Mayten Avenue;
- Sub-Area 18 Industrial Area Specific Plan (Empire Lakes) bound by 4th Street, Milliken Avenue, railroad track, and Utica Street;
- Foothill Boulevard along the Deer Creek Channel;
- Church Avenue (south side) between Center and Haven Avenue;
- Western Gateway (Bear Gulch Area);
- Foothill Boulevard-Cucamonga Channel Site (near northwest corner of Foothill Boulevard and Vineyard Avenue; and
- Historic Alta Loma (Amethyst Site).

Industrial Designations

The proposed General Plan Update establishes three industrial designations to allow for a variety of diverse industrial employment opportunities throughout the City. Industrial densities, expressed as a probable range of FAR, for each of the industrial designations are:

- Industrial Park (0.40-0.60 FAR);
- General Industrial (0.50-0.60 FAR); and
- Heavy Industrial (0.40-0.50 FAR).

¹ Floor Area Ratio is the ratio of gross floor area of all buildings (not including parking structures) permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net square feet of land area, a Floor Area Ratio of 1.5 would allow 15,000 square feet of floor area.

NOTICE OF PREPARATION

City of Rancho Cucamonga

Open Space and Public Facility Designations

The Open Space and Public Facility Designations, including a conservation designation that identifies areas for preservation, an open space designation that allows for limited development, and four public facility designations that allow for land uses that are operated for public benefit. The density range is expressed as a probable range of FAR and are as follows:

- Hillside Residential (0.10–2.0 dwelling units per acre);
- Conservation (no development);
- Open Space (0–0.10 dwelling units per acre);
- Public Facilities—Flood Control/Utility Corridor (no development);
- Public Facilities—Civic/Regional (0.40-1.0 FAR);
- Public Facilities—Schools (0.10-0.20 FAR); and
- Public Facilities—Parks.

Land Use Overlays

In addition to land use designations, the proposed General Plan Update identifies five overlay zones to allow for additional flexibility in land development within specific areas of the City. Overlay zones are intended to provide customized development standards to support the overall goals of the City. These overlay zones are as follows:

- Haven Avenue Office Overlay;
- Hillside Overlay;
- Senior Housing Overlay;
- Equestrian/Rural Area Overlay; and
- Master Plan Overlay.

General Plan Buildout

The Managing Land Use, Community Design, and Historic Resources Chapter also establishes a build-out summary for the City, as shown in the table below, based on the proposed Land Use Plan (refer to Exhibit 3).

	Baseline: 2009			General Plan Build Out: 2030			Change	Percent Change
	City	SOI	Total	City	SOI	Total		
Dwelling Units	55,608	91	55,669	62,204	946	63,150	7,450	13.4
Population	179,200	300	179,500	200,400	3,000	203,400	23,900	13.3
Non-Residential Square Feet	80,030,100	0	80,030,100	99,797,700	0	99,797,700	19,767,600	24.7
Employment	77,350	0	77,350	103,040	0	103,040	25,690	33.2

SOI: Sphere of Influence
Source: Hogle Ireland 2009

Community Mobility

The updated Community Mobility Chapter addresses the need for transportation planning to enhance and support planned growth within the City and its sphere of influence. This Chapter addresses both conventional transportation issues related to vehicular use of the local roadway network as well as integration of alternative transportation methods such as mass transit, bicycle and pedestrian networks, and equestrian and hiking trails. This Chapter contains goals and policies that support development of a balanced, citywide circulation system that accommodates all users and all transportation modes.

Economic Development

The Economic Development Chapter sets forth a plan for continued City development in a manner that capitalizes on the City's economically diverse, relatively affluent, and well-educated community. This Chapter identifies

NOTICE OF PREPARATION

City of Rancho Cucamonga

commercial and industrial infill and revitalization opportunities within the City with the goal of attracting professional and “green” technology employers to continue its economic expansion and diversification. As part of this Chapter, the following key economic development issues are identified and discussed:

- Diverse and Multi-Focused Local Economy;
- Knowledge-Based Businesses;
- Retail Expansion;
- Industrial Retention; and
- Quality of Life.

Community Services

The updated Community Services Chapter is organized into four sections: Parks and Special Use Facilities, Hiking and Riding Trails, Community Services Programs, and Healthy Lifestyles. Rancho Cucamonga is a City of communities with high-quality park facilities, extensive hiking and riding trails, and comprehensive community service programs. The Community Services Chapter identifies the anticipated need for community services based on the anticipated growth patterns of the City and establishes goals and policies to support the continuation of community services which promote the well being of the City’s population.

Resource Conservation

The Resource Conservation Chapter guides the preservation, protection, conservation, re-use, replenishment, and efficient use of Rancho Cucamonga’s limited natural resources including water, open space, minerals, agricultural lands, and solar energy. The Chapter is divided into six sections that address Open Space Resources, Water Resources, Energy Resources, Green Buildings, Mineral Resources, and Wildlife Resources. This Chapter identifies strategies for maintaining the City’s resources through a series of goals and policies aimed at preserving existing resources.

Public Facilities and Infrastructure

The Public Facilities and Infrastructure Chapter addresses the needs for infrastructure and public facilities to support future growth in the City and its Sphere of Influence and to maintain and enhance its quality of life. Specifically, this Chapter focuses on the provision of high-quality public facilities, support for educational opportunities, and maintenance and expansion of public infrastructure to meet the planned growth. This Chapter is divided into the following key areas of discussion:

- Public Facilities;
- Schools and Educational Facilities;
- Libraries;
- Animal Care and Services; and
- Infrastructure.

Public Health and Safety

The Public Health and Safety Chapter provides a proactive approach to public health and safety issues. Specifically, it identifies potential known hazards (e.g., seismic and geologic hazards, hazardous materials, and flood hazards, among others) and provides methods for mitigating hazards through the planning process. In addition to the more common hazards to public health and safety, this Chapter addresses the need to maintain a safe environment by promoting sustainable living and decreasing impacts related to global climate change by establishing goals and policies directed at encouraging programs such as renewable energy use, transit-oriented development, recycling, and green building. This Chapter is divided into the following key areas of discussion:

- Fire and Emergency Services;
- Crime Prevention;
- Seismic and Geologic Hazards;
- Flood Hazards and Inundation;
- Wind Hazards;

NOTICE OF PREPARATION

City of Rancho Cucamonga

- Air Quality, Atmosphere, and Climate; and
- Noise.

Alternatives to the Proposed Project

CEQA Guidelines Section 15126.6(a) requires that, “an EIR describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives”. The range of alternatives to be addressed for the Project will include alternatives that are specifically required (i.e., No Project; No Action/No Development) by CEQA as well as additional General Plan land use alternatives.

Public Involvement

In preparing the proposed Rancho Cucamonga General Plan Update, the City conducted an extensive community involvement process. As part of this process, the City created the General Plan Advisory Committee (GPAC) with community members and City department liaisons. The GPAC conducted seven interactive workshops and an extensive Visioneering process that helped to define community issues. All GPAC meetings were open to the public. A set of Guiding Principles were established by the GPAC and vetted by the community through a series of 45 workshops known as the “Spirit of Rancho Cucamonga Road Show” with more than 600 participants. Those principles were formally adopted by the City Council.

Other opportunities for public input included a General Plan Workshop held on Saturday, May 16, 2009, Policy Discussion Forums held in July and August 2009, a General Plan Website which continues to offer current information and instructions on how to submit comments, an informal survey tool called Visioneering with more than 750 responses, more than 40 stakeholder interviews and focus groups, and a random dial telephone survey of over 400 City residents.

Potential Environmental Effects

The City has determined that the update to the General Plan may have potentially significant impacts on the environment and has elected to prepare a Program EIR pursuant to CEQA to address these impacts. Using the City of Rancho Cucamonga Environmental Checklist as a guide, at least one impact area has been identified as having a “Potential Significant Impact” in the following environmental topics, and will be addressed in the Program EIR:

Aesthetics	Agricultural Resources
Air Quality	Biological Resources
Climate Change	Cultural Resources
Geology and Soils	Hazards and Hazardous Materials
Hydrology and Water Quality	Land Use and Planning
Mineral Resources	Noise
Population and Housing	Public Services
Recreation	Transportation/Circulation
Utility and Service Systems	

The Program EIR will address project impacts on each of these environmental topics in addition to cumulative and direct and indirect growth-inducing impacts.

The scope of the environmental analysis for the proposed General Plan Update project is subject to comments from agencies and the public. This Notice of Preparation will remain in effect for a 30-day public review period per

NOTICE OF PREPARATION

City of Rancho Cucamonga

PRC, Section 21080.4 and CEQA Guidelines, Section 15082. Public agencies, interested organizations, and individuals have the opportunity to comment on and identify those environmental issues that have the potential to be affected by the project and should be addressed further by the City of Rancho Cucamonga in the Program EIR.

Public Review Period of the Notice of Preparation

November 16, 2009–December 15, 2009

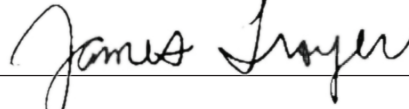
Public Scoping Meeting

In accordance with CEQA Guidelines, Section 21083.9, a public scoping meeting regarding the project is required. The City of Rancho Cucamonga has scheduled a public scoping meeting at the date, time, and place shown below. The purpose of the scoping meeting is to obtain input regarding the environmental impacts that will be addressed in the Program EIR. You are invited to attend. Should you have any questions regarding this public scoping meeting, contact Mr. Nicholson, Assistant Planning Director (see page 1).

Date:	Time:	Location:
November 23, 2009	2:00 PM	Rancho Cucamonga City Hall Tri-Communities Room 10500 Civic Center Drive Rancho Cucamonga, California 91730

Date: November 12, 2009

Signature: _____



Title: _____

Planning Director



November 24, 2009

CITY OF RANCHO CUCAMONGA

NOV 30 2009

Corkran W. Nicholson
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

RECEIVED - PLANNING

RE: Notice of Preparation for a Draft Environmental Impact Report for the City of Rancho Cucamonga's General Plan Update, SCH# 2000061027

Dear Mr. Nicholson:

Thank you for the opportunity to comment on your Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the city's general plan update. In preparing the general plan and accompanying DEIR, the city should examine the sections of state planning law that involve potential hazards the city may face. For your information, I have underlined specific sections of state planning law where identification and analysis of hazards are discussed (see Attachment A).

Prior to the release of the draft general plan or within the DEIR, city staff or your consultants should examine each of the requirements in state planning law and determine if there are hazard issues within the community which the general plan should address. A table in the DEIR (or general plan) which identifies these specific issues and where they are addressed in the general plan would be helpful in demonstrating the city has complied with these requirements. If the DEIR determines that state planning law requirements have not been met, it should recommend that these issues be addressed in the general plan as a mitigation measure.

We note that state planning law includes a requirement for consultations with state agencies in regard to information related to hazards. CalEMA would be happy to share all available information at our disposal to facilitate the city's ability to comply with state planning and environmental laws.

If you have any questions about these comments, please contact Andrew Rush at (916) 845-8269 or andrew.rush@OES.ca.gov.

Sincerely,

Dennis Castrillo
Environmental Officer

cc: State Clearinghouse

Attachment A Hazards and State Planning Law Requirements

General Plan Consistency

65300.5. In construing the provisions of this article, the Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.

Seven Mandated Elements

65302. The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements:

(a) A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The location and designation of the extent of the uses of the land for public and private uses shall consider the identification of land and natural resources pursuant to paragraph (3) of subdivision (d). The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall identify and annually review those areas covered by the plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources. The land use element shall also do both of the following:

(1) Designate in a land use category that provides for timber production those parcels of real property zoned for timberland production pursuant to the California Timberland Productivity Act of 1982, Chapter 6.7 (commencing with Section 51100) of Part 1 of Division 1 of Title 5.

(2) Consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas, when proposing zoning ordinances or designating land uses covered by the general plan for land, or other territory adjacent to military facilities, or underlying designated military aviation routes and airspace.

(A) In determining the impact of new growth on military readiness activities, information provided by military facilities shall be considered. Cities and counties shall address military impacts based on information from the military and other sources.

(B) The following definitions govern this paragraph:

(i) "Military readiness activities" mean all of the following:

(I) Training, support, and operations that prepare the men and women of the military for combat.

(II) Operation, maintenance, and security of any military installation.

(III) Testing of military equipment, vehicles, weapons, and sensors for proper operation or suitability for combat use.

(ii) "Military installation" means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the United States Department of Defense as defined in paragraph (1) of subsection (e) of Section 2687 of Title 10 of the United States Code.

(b) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.

(c) A housing element as provided in Article 10.6 (commencing with Section 65580).

(d) (1) A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element shall consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands, including military installations. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies, including flood management, water conservation, or groundwater agencies that have developed, served, controlled, managed, or conserved water of any type for any purpose in the county or city for which the plan is prepared. Coordination shall include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or county.

(2) The conservation element may also cover all of the following:

(A) The reclamation of land and waters.

(B) Prevention and control of the pollution of streams and other waters.

(C) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.

(D) Prevention, control, and correction of the erosion of soils, beaches, and shores.

(E) Protection of watersheds.

(F) The location, quantity and quality of the rock, sand and gravel resources.

(3) Upon the next revision of the housing element on or after January 1, 2009, the conservation element shall identify rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.

(e) An open-space element as provided in Article 10.5 (commencing with Section 65560).

(f) (1) A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Care Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

(A) Highways and freeways.

(B) Primary arterials and major local streets.

(C) Passenger and freight on-line railroad operations and ground rapid transit systems.

(D) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.

(E) Local industrial plants, including, but not limited to, railroad classification yards.

(F) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.

(2) Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.

(3) The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.

(4) The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.

(g) (1) A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, military installations, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

(2) The safety element, upon the next revision of the housing element on or after January 1, 2009, shall also do the following:

(A) Identify information regarding flood hazards, including, but not limited to, the following:

(i) Flood hazard zones. As used in this subdivision, "flood hazard zone" means an area subject to flooding that is delineated as either a special hazard area or an area of moderate or minimal hazard on an official flood insurance rate map issued by the Federal Emergency Management Agency. The identification of a flood hazard zone does not imply that areas outside the flood hazard zones or uses permitted within flood hazard zones will be free from flooding or flood damage.

(ii) National Flood Insurance Program maps published by FEMA.

(iii) Information about flood hazards that is available from the United States Army Corps of Engineers.

(iv) Designated floodway maps that are available from the Central Valley Flood Protection Board.

(v) Dam failure inundation maps prepared pursuant to Section 8589.5 that are available from the Office of Emergency Services.

(vi) Awareness Floodplain Mapping Program maps and 200-year flood plain maps that are or may be available from, or accepted by, the Department of Water Resources.

(vii) Maps of levee protection zones.

(viii) Areas subject to inundation in the event of the failure of project or nonproject levees or floodwalls.

(ix) Historical data on flooding, including locally prepared maps of areas that are subject to flooding, areas that are vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding.

(x) Existing and planned development in flood hazard zones, including structures, roads, utilities, and essential public facilities.

(xi) Local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services.

(B) Establish a set of comprehensive goals, policies, and objectives based on the information identified pursuant to subparagraph (A), for the protection of the community from the unreasonable risks of flooding, including, but not limited to:

- (i) Avoiding or minimizing the risks of flooding to new development.
 - (ii) Evaluating whether new development should be located in flood hazard zones, and identifying construction methods or other methods to minimize damage if new development is located in flood hazard zones.
 - (iii) Maintaining the structural and operational integrity of essential public facilities during flooding.
 - (iv) Locating, when feasible, new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities or identifying construction methods or other methods to minimize damage if these facilities are located in flood hazard zones.
 - (v) Establishing cooperative working relationships among public agencies with responsibility for flood protection.
- (C) Establish a set of feasible implementation measures designed to carry out the goals, policies, and objectives established pursuant to subparagraph (B).
- (3) After the initial revision of the safety element pursuant to paragraph (2), upon each revision of the housing element, the planning agency shall review and, if necessary, revise the safety element to identify new information that was not available during the previous revision of the safety element.
- (4) Cities and counties that have flood plain management ordinances that have been approved by FEMA that substantially comply with this section, or have substantially equivalent provisions to this subdivision in their general plans, may use that information in the safety element to comply with this subdivision, and shall summarize and incorporate by reference into the safety element the other general plan provisions or the flood plain ordinance, specifically showing how each requirement of this subdivision has been met.
- (5) Prior to the periodic review of its general plan and prior to preparing or revising its safety element, each city and county shall consult the California Geological Survey of the Department of Conservation, the Central Valley Flood Protection Board, if the city or county is located within the boundaries of the Sacramento and San Joaquin Drainage District, as set forth in Section 8501 of the Water Code, and the Office of Emergency Services for the purpose of including information known by and available to the department, the office, and the board required by this subdivision.
- (6) To the extent that a county's safety element is sufficiently detailed and contains appropriate policies and programs for adoption by a city, a city may adopt that portion of the county's safety element that pertains to the city's planning area in satisfaction of the requirement imposed by this subdivision.

Consistency with Airport Land Use Plans

65302.3. (a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

Review of Safety Element

65302.5. (a) At least 45 days prior to adoption or amendment of the safety element, each county and city shall submit to the Division of Mines and Geology of the Department of Conservation

one copy of a draft of the safety element or amendment and any technical studies used for developing the safety element. The division may review drafts submitted to it to determine whether they incorporate known seismic and other geologic hazard information, and report its findings to the planning agency within 30 days of receipt of the draft of the safety element or amendment pursuant to this subdivision. The legislative body shall consider the division's findings prior to final adoption of the safety element or amendment unless the division's findings are not available within the above prescribed time limits or unless the division has indicated to the city or county that the division will not review the safety element. If the division's findings are not available within those prescribed time limits, the legislative body may take the division's findings into consideration at the time it considers future amendments to the safety element. Each county and city shall provide the division with a copy of its adopted safety element or amendments. The division may review adopted safety elements or amendments and report its findings. All findings made by the division shall be advisory to the planning agency and legislative body.

(1) The draft element of or draft amendment to the safety element of a county or a city's general plan shall be submitted to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county at least 90 days prior to either of the following:

(A) The adoption or amendment to the safety element of its general plan for each county that contains state responsibility areas.

(B) The adoption or amendment to the safety element of its general plan for each city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177.

(2) A county that contains state responsibility areas and a city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177, shall submit for review the safety element of its general plan to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county in accordance with the following dates as specified, unless the local government submitted the element within five years prior to that date:

(A) Local governments within the regional jurisdiction of the San Diego Association of Governments: December 31, 2010.

(B) Local governments within the regional jurisdiction of the Southern California Association of Governments: December 31, 2011.

(C) Local governments within the regional jurisdiction of the Association of Bay Area Governments: December 31, 2012.

(D) Local governments within the regional jurisdiction of the Council of Fresno County Governments, the Kern County Council of Governments, and the Sacramento Area Council of Governments: June 30, 2013.

(E) Local governments within the regional jurisdiction of the Association of Monterey Bay Area Governments: December 31, 2014.

(F) All other local governments: December 31, 2015.

(3) The State Board of Forestry and Fire Protection shall, and a local agency may, review the draft or an existing safety element and report its written recommendations to the planning agency within 60 days of its receipt of the draft or existing safety element. The State Board of Forestry and Fire Protection and local agency shall review the draft or existing safety element and may

offer written recommendations for changes to the draft or existing safety element regarding both of the following:

(A) Uses of land and policies in state responsibility areas and very high fire hazard severity zones that will protect life, property, and natural resources from unreasonable risks associated with wildland fires.

(B) Methods and strategies for wildland fire risk reduction and prevention within state responsibility areas and very high hazard severity zones.

(b) Prior to the adoption of its draft element or draft amendment, the board of supervisors of the county or the city council of a city shall consider the recommendations made by the State Board of Forestry and Fire Protection and any local agency that provides fire protection to territory in the city or county. If the board of supervisors or city council determines not to accept all or some of the recommendations, if any, made by the State Board of Forestry and Fire Protection or local agency, the board of supervisors or city council shall communicate in writing to the State Board of Forestry and Fire Protection or to the local agency, its reasons for not accepting the recommendations.

Open Space Plans

65560. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maziar Movassaghi, Acting Director
5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

December 9, 2009

Mr. Corkran W. Nicholson
Assistant Planning Director
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, California 91730
Corky.Nicholson@cityofrc.us

NOTICE OF PREPARATION FOR A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RANCHO CUCAMONGA GENERAL PLAN PROJECT (SCH# 2000061027), CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Nicholson:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the above-mentioned Project. The following project description is stated in your document: "The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City of Rancho Cucamonga and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City. The project involves an update to the current (2001) general Plan, including a redistribution of land uses to accommodate the future, anticipated City growth. Specifically, the project evaluates an additional 7,450 dwelling units, 23,900 increase in population, 19.7 million additional square feet of non-residential development and increase of 25,690 jobs. The proposed General Plan Update contains the following elements (referred to as "Chapters"): Managing Land use, Community Design, Historic Resources, and Public Art; Community Mobility; Economic Development; Community Services; Resource Conservation; Public Facilities and infrastructure; Public Health and Safety; The General Plan Update identifies 21 land use designations that are divided into nine categories, including residential, commercial, mixed-use, industrial, public facilities, schools, parks, open space and conservation, and vacant lands." DTSC has the following comments:

- 1) The EIR should identify the current or historic uses in the Project area that may have resulted in a release of hazardous wastes/substances, and any known or potentially contaminated sites within the proposed Project area. For all identified

sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the pertinent regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S. EPA).
 - EnviroStor: A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S. EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
 - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
 - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No. 11 below for more information.
- 3) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in

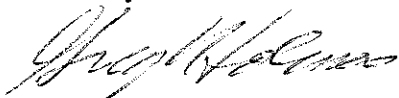
which hazardous substances were found should be clearly summarized in a table.

- 4) Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted in the Project area prior to the new development or any construction. All closure, certification or remediation approval reports by these agencies should be included in the EIR.
- 5) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.
- 6) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.
- 7) Human health and the environment of sensitive receptors should be protected during construction or demolition activities. If it is found necessary, a site investigation and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

- 9) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented.
- 10) If the site was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.
- 11) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Mr. Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov or by phone at (714) 484-5491.

Sincerely,

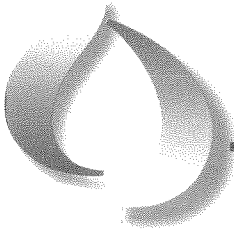


Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
nritter@dtsc.ca.gov

CEQA# 2716



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

6075 Kimball Ave, • Chino, CA 91708
P.O. Box 9020 • Chino, Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 597-8875
www.ieua.org

December 9, 2009

Mr. Corkran W. Nicholson, Assistant Planning Director
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Rancho Cucamonga General Plan Update Project

Dear Mr. Nicholson,

The Inland Empire Utilities Agency (IEUA) Planning & Water Resources Department has reviewed the above referenced subject and has the following comments/recommendations:

- In order to drought proof and conserve precious drinking water supply, IEUA recommends the development(s) to install recycled water facilities to irrigate landscaping areas wherever feasible. This is consistent with CVWD's recycled water ordinance No. 45.
- It appears that a number of projects within the General Plan Update Project will provide wastewater flow to existing IEUA sewer lines, consistent with IEUA's Sewer Master Plan. Please continue to notify IEUA of any additional connections to our Regional Sewer System.

If you have any questions, please feel free to contact me at (909) 993-1635 or by email at rshaw@ieua.org.

Regards,

Ryan Shaw
Planning & Water Resources Department
Inland Empire Utilities Agency
December 9, 2009



PAUL S. LEON
MAYOR

JIM W. BOWMAN
MAYOR PRO TEM

ALAN D. WAPNER
SHEILA MAUTZ
DEBRA DORST-PORADA
COUNCIL MEMBERS

December 11, 2009

GREGORY C. DEVEREAUX
CITY MANAGER

MARY E. WIRTES, MMC
CITY CLERK

JAMES R. MILHISER
TREASURER

City of Rancho Cucamonga
Planning Department
Mr. Corkran W. Nicholson, Assistant Planning Director
10500 Civic Center Drive
Rancho Cucamonga, California 91730

RE: Notice of Preparation of Draft Environmental Impact Report for the City of Rancho Cucamonga General Plan Update Project

Mr. Nicholson,

Thank you for allowing the City of Ontario the opportunity to review and comment on the above referenced project. After reviewing the information provided for the proposed general plan update, the City of Ontario has identified the following concerns which should be analyzed and included in the DEIR:

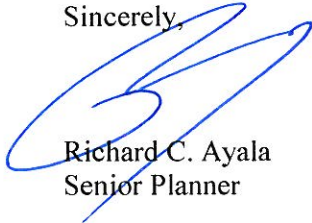
1. Address ways to redistribute the heavy truck volumes generated by the City of Rancho Cucamonga industrial developments away from Ontario's shared hospitality and retail corridors along Fourth Street between Milliken Avenue and the I-15 Freeway and on Milliken Avenue between Fourth Street and the I-10 Freeway via a new interchange on the I-15 Freeway within the City of Rancho Cucamonga. Provide timeline for the construction of the new interchange.
2. Analyze and estimate Rancho Cucamonga's fair share contribution for the modification of the I-10 Freeway at Vineyard Avenue Interchange due to trips generated in Rancho Cucamonga. The current SANBAG Measure I Nexus Study does not assign a fair share of the interchange costs to Rancho Cucamonga.
3. Discuss and address the potential hydraulic and water quality impacts along the City of Ontario border that may be created by proposed changes in drainage patterns in the Rancho Cucamonga General Plan Update.

Mr. Nicholson
December 11, 2009

4. The City of Ontario currently owns a parcel (APN 0229-023-07) located on the eastside of Rochester Avenue just south of Foothill Boulevard in the City of Rancho Cucamonga for future construction of an 8 million gallon potable water reservoir for the 1212 Pressure Zone as identified in the City's Water and Recycled Water Master Plan. The DEIR should address any impacts to ensure that the proposed land use plan remains compatible with Ontario's future use of the site.

We appreciate being involved in the environmental review of the project and look forward to continued communications regarding this project. We will also be interested in reviewing the DEIR and technical studies once they are made available. If you have any questions regarding our comments, please contact me at (909) 395-2421.

Sincerely,



Richard C. Ayala
Senior Planner



STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
 STATE CLEARINGHOUSE AND PLANNING UNIT



ARNOLD SCHWARZENEGGER
 GOVERNOR

CYNTHIA BRYANT
 DIRECTOR

Notice of Preparation

CITY OF RANCHO CUCAMONGA

November 16, 2009

NOV 19 2009

To: Reviewing Agencies

RECEIVED - PLANNING

Re: City of Rancho Cucamonga General Plan Update
 SCH# 2000061027

Attached for your review and comment is the Notice of Preparation (NOP) for the City of Rancho Cucamonga General Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Corkran W. Nicholson
 City of Rancho Cucamonga
 10500 Civic Center Drive
 Rancho Cucamonga, CA 91730

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,


 Scott Morgan
 Assistant Deputy Director & Senior Planner, State Clearinghouse

Attachments
 cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2000061027
Project Title City of Rancho Cucamonga General Plan Update
Lead Agency Rancho Cucamonga, City of

Type **NOP** Notice of Preparation
Description The project involves an update to the current (2001) General Plan, including a redistribution of land uses to accommodate the future, anticipated City growth. Specifically, the project evaluates an additional 7,450 dwelling units, 23,900 increase in population, 19.7 million additional square feet of non-residential development and an increase of 25,690 jobs.

Lead Agency Contact

Name Corkran W. Nicholson
Agency City of Rancho Cucamonga
Phone 909 477-2750 **Fax**
email
Address 10500 Civic Center Drive
City Rancho Cucamonga **State** CA **Zip** 91730

Project Location

County San Bernardino
City Rancho Cucamonga
Region
Cross Streets I-15 and SR-210
Lat / Long 34° 7' 24" N / 117° 34' 46" W
Parcel No. multiple
Township **Range** **Section** **Base**

Proximity to:

Highways I-15/SR-210, I-10
Airports Ontario Airport
Railways multiple
Waterways multiple
Schools Multiple
Land Use Multiple

Project Issues Aesthetic/Visual; Archaeologic-Historic; Agricultural Land; Air Quality; Biological Resources; Economics/Jobs; Fiscal Impacts; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wildlife; Wetland/Riparian; Landuse; Growth Inducing; Cumulative Effects

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Native American Heritage Commission; Office of Emergency Services; Department of Fish and Game, Region 6; California Highway Patrol; Department of Housing and Community Development; Department of Toxic Substances Control; Integrated Waste Management Board; Caltrans, District 8; Regional Water Quality Control Board, Region 8

Date Received 11/16/2009 **Start of Review** 11/16/2009 **End of Review** 12/15/2009

Resources Agency

- Resources Agency
- Nadell Gayou

- Dept. of Boating & Waterways
- Mike Sotelo

- California Coastal Commission
- Elizabeth A. Fuchs

- Colorado River Board
- Gerald R. Zimmermann

- Dept. of Conservation
- Rebecca Salazar

- California Energy Commission
- Eric Knight

- Cal Fire
- Allen Robertson

- Office of Historic Preservation
- Wayne Donaldson

- Dept. of Parks & Recreation
- Environmental Stewardship Section

- Central Valley Flood Protection Board
- James Heredia

- S.F. Bay Conservation & Devt. Comm.
- Steve McAdam

- Dept. of Water Resources
- Resources Agency
- Nadell Gayou

- Conservancy

Fish and Game

- Depart. of Fish & Game
- Scott Flint
- Environmental Services Division

- Fish & Game Region 1
- Donald Koch

- Fish & Game Region 1E
- Laurie Harnsberger

- Fish & Game Region 2
- Jeff Drongesen

- Fish & Game Region 3
- Robert Floerke

- Fish & Game Region 4
- Julie Vance

- Fish & Game Region 5
- Don Chadwick
- Habitat Conservation Program

- Fish & Game Region 6
- Gabrina Gatchel
- Habitat Conservation Program

- Fish & Game Region 6 I/M
- Brad Henderson
- Inyo/Mono, Habitat Conservation Program

- Dept. of Fish & Game M
- George Isaac
- Marine Region

Other Departments

- Food & Agriculture
- Steve Shaffer
- Dept. of Food and Agriculture

- Dept. of General Services
- Public School Construction

- Dept. of General Services
- Anna Garbeff
- Environmental Services Section

- Dept. of Public Health
- Bridgette Blinning
- Dept. of Health/Drinking Water

Independent Commissions, Boards

- Delta Protection Commission
- Linda Flack

- Office of Emergency Services
- Dennis Castillo

- Governor's Office of Planning & Research
- State Clearinghouse

- Native American Heritage Comm.
- Debbie Treadway

- Public Utilities Commission
- Leo Wong

- Santa Monica Bay Restoration
- Guangyu Wang

- State Lands Commission
- Marina Brand

- Tahoe Regional Planning Agency (TRPA)
- Cherry Jacques

Business, Trans & Housing

- Caltrans - Division of Aeronautics
- Sandy Hesnard

- Caltrans - Planning
- Terri Pencovic

- California Highway Patrol
- Scott Loetscher
- Office of Special Projects

- Housing & Community Development
- CEQA Coordinator
- Housing Policy Division

- Dept. of Transportation
- Rex Jackman

- Caltrans, District 1
- Marcelino Gonzalez

- Caltrans, District 2
- Bruce de Terra

- Caltrans, District 3
- Lisa Carbori

- Caltrans, District 4
- David Murray

- Caltrans, District 5
- Michael Navarro

- Caltrans, District 6
- Elmer Alvarez

- Caltrans, District 8
- Dan Kopuisky

- Caltrans, District 9
- Gayle Rosander

- Caltrans, District 10
- Tom Dumas

- Caltrans, District 11
- Jacob Armstrong

- Caltrans, District 12
- Chris Herre

Cal EPA

- Air Resources Board
- Airport Projects
- Jim Lerner

- Transportation Projects
- Douglas Ito

- Industrial Projects
- Mike Tollstrup

- California Integrated Waste Management Board
- Sue O'Leary

- State Water Resources Control Board
- Regional Programs Unit
- Division of Financial Assistance

- State Water Resources Control Board
- State Water Resources Control Board
- Student Intern, 401 Water Quality Certification Unit
- Division of Water Quality

- State Water Resources Control Board
- Steven Herrera
- Division of Water Rights

- Dept. of Toxic Substances Control
- CEQA Tracking Center
- Department of Pesticide Regulation
- CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- RWQCB 1
- Cathleen Hudson
- North Coast Region (1)

- RWQCB 2
- Environmental Document Coordinator
- San Francisco Bay Region (2)

- RWQCB 3
- Central Coast Region (3)

- RWQCB 4
- Teresa Rodgers
- Los Angeles Region (4)

- RWQCB 5S
- Central Valley Region (5)

- RWQCB 5F
- Central Valley Region (5)
- Fresno Branch Office

- RWQCB 5R
- Central Valley Region (5)
- Redding Branch Office

- RWQCB 6
- Lahontan Region (6)

- RWQCB 6V
- Lahontan Region (6)
- Victorville Branch Office

- RWQCB 7
- Colorado River Basin Region (7)

- RWQCB 8
- Santa Ana Region (8)

- RWQCB 9
- San Diego Region (9)

- Other

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION



COUNTY OF SAN BERNARDINO

825 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130

GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.
Director of Public Works

November 19, 2009

File #10(ENV)-4.01

City of Rancho Cucamonga
Planning Department
Attn: Corkran W. Nicholson, Assistant Planning Director
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

RE: NOTICE OF PREPARATION OF DRAFT EIR FOR RANCHO CUCAMONGA GENERAL
PLAN UPDATE PROJECT

Dear Mr. Nicholson,

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project.

After reviewing the submitted document, our Department would like to receive a copy of the environmental document and any technical reports/studies that will be prepared for this project, when they become available. At that time, our Department will review the project and provide comments.

Sincerely,

A handwritten signature in cursive script that reads "Frank Molina".

FRANK MOLINA, Supervising Planner
Environmental Management Division

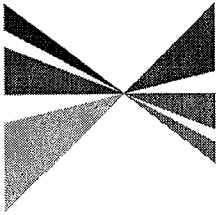
CITY OF RANCHO CUCAMONGA

NOV 23 2009

FM:nh/CEQA Rec'd_Rancho Cucamonga_GP Update_EIR Reqst'd

RECEIVED - PLANNING

cc: Naresh P. Varma
GMB/ARI Reading File



ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

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Carl Morehouse, Ventura

Energy & Environment
Keith Hanks, Azusa

Transportation
Mike Ten, South Pasadena

December 14, 2009

Mr. Corkran W. Nicholson
Assistant Planning Director
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730
Corky.Nicholson@cityofrc.us

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Rancho Cucamonga General Plan Update Project [I20090652]

Dear Mr. Nicholson,

Thank you for submitting the **Notice of Preparation of a Draft Environmental Impact Report for the Rancho Cucamonga General Plan Update [I20090652]** to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372 (replacing A-95 Review). Additionally, pursuant to Public Resources Code Section 21083(d) SCAG reviews Environmental Impact Reports of projects of regional significance for consistency with regional plans per the California Environmental Quality Act Guidelines, Sections 15125(d) and 15206(a)(1). SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082.

SCAG staff has reviewed this project and determined that the proposed project is regionally significant per California Environmental Quality Act (CEQA) Guidelines, Sections 15125 and/or 15206. The proposed project is an update of the City's General Plan and will cover six of the seven State-mandated elements.

Policies of SCAG's Regional Transportation Plan (RTP) and Compass Growth Visioning (CGV) that may be applicable to your project are outlined in the attachment. The RTP, CGV, and table of policies can be found on the SCAG web site at: <http://scag.ca.gov/igr>. For ease of review, we would encourage you to use a side-by-side comparison of all SCAG policies with a discussion of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format (example attached).

The attached policies are meant to provide guidance for considering the proposed project within the context of our regional goals and policies. We also encourage the use of the SCAG List of Mitigation Measures extracted from the RTP to aid with demonstrating consistency with regional plans and policies. **Please provide a minimum of 45 days for SCAG to review the EIR and associated plans when these documents are available.** If you have any questions regarding the attached comments, please contact Bernard Lee at (213) 236-1895 or leeb@scag.ca.gov. Thank you.

Sincerely,

Jacob Lieb, Manager
Assessment, Housing & EIR

DOCS# 155027

**COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT
ENVIRONMENTAL IMPACT REPORT FOR THE RANCHO
CUCAMONGA GENERAL PLAN UPDATE PROJECT
[I20090652]**

PROJECT LOCATION

The City of Rancho Cucamonga is located in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south and east, including the Cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the east. The northernmost portion of the City's Sphere of Influence is adjacent to the San Bernardino National Forest.

PROJECT DESCRIPTION

Each city and county in California must prepare a comprehensive, long-term general plan to guide its future. California state law requires each city and county to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (California Government Code, 65300). A general plan expresses the community's development goals and embodies public policies relative to the distribution of future land uses, both public and private. The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City.

The proposed General Plan Update will address the six of the seven State-mandated General Plan elements and other issues that are important to the community. The proposed General Plan Update contains the following elements (referred to as "Chapters"):

- Managing Land Use, Community Design, Historic Resources, and Public Art
- Community Mobility
- Economic Development
- Community Services
- Resource Conservation
- Public Facilities and Infrastructure
- Public Health and Safety

The City is currently updating its General Plan Housing Element; however, this update is independent of this General Plan Update process.

CONSISTENCY WITH REGIONAL TRANSPORTATION PLAN

Regional Growth Forecasts

The EIR should reflect the most current SCAG forecasts, which are the 2008 RTP (May 2008) Population, Household and Employment forecasts. The forecasts for your region, subregion, and city are as follows:

Adopted SCAG Regionwide Forecasts¹

	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Population	19,418,344	20,465,830	21,468,948	22,395,121	23,255,377	24,057,286
Households	6,086,986	6,474,074	6,840,328	7,156,645	7,449,484	7,710,722
Employment	8,349,453	8,811,406	9,183,029	9,546,773	9,913,376	10,287,125

Adopted SANBAG Subregion Forecasts¹

	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Population	2,182,049	2,385,761	2,582,773	2,773,938	2,957,754	3,133,797
Households	637,252	718,601	787,138	852,994	914,575	972,565
Employment	810,232	897,493	965,781	1,045,471	1,134,964	1,254,752

Adopted City of Rancho Cucamonga Forecasts¹

	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Population	171,980	172,404	172,409	172,413	172,417	172,421
Households	52,027	53,396	53,878	54,341	54,774	55,182
Employment	67,382	73,494	78,524	84,414	90,913	97,873

1. The 2008 RTP growth forecast at the regional, subregional, and city level was adopted by the Regional Council in May 2008. City totals are the sum of small area data and should be used for advisory purposes only.

The **2008 Regional Transportation Plan (RTP)** also has goals and policies that are pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The RTP continues to support all applicable federal and state laws in implementing the proposed project. Among the relevant goals and policies of the RTP are the following:

Regional Transportation Plan Goals:

- RTP G1** *Maximize mobility and accessibility for all people and goods in the region.*
- RTP G2** *Ensure travel safety and reliability for all people and goods in the region.*
- RTP G3** *Preserve and ensure a sustainable regional transportation system.*
- RTP G4** *Maximize the productivity of our transportation system.*
- RTP G5** *Protect the environment, improve air quality and promote energy efficiency.*
- RTP G6** *Encourage land use and growth patterns that complement our transportation investments.*
- RTP G7** *Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.*

GROWTH VISIONING

The fundamental goal of the **Compass Growth Visioning** effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. Thus, decisions regarding growth, transportation, land use, and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity. The following "Regional Growth Principles" are proposed to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Each principle is followed by a specific set of strategies intended to achieve this goal.

Principle 1: Improve mobility for all residents.

- GV P1.1** *Encourage transportation investments and land use decisions that are mutually supportive.*
- GV P1.2** *Locate new housing near existing jobs and new jobs near existing housing.*
- GV P1.3** *Encourage transit-oriented development.*
- GV P1.4** *Promote a variety of travel choices*

Principle 2: Foster livability in all communities.

- GV P2.1 *Promote infill development and redevelopment to revitalize existing communities.*
- GV P2.2 *Promote developments, which provide a mix of uses.*
- GV P2.3 *Promote "people scaled," walkable communities.*
- GV P2.4 *Support the preservation of stable, single-family neighborhoods.*

Principle 3: Enable prosperity for all people.

- GV P3.1 *Provide, in each community, a variety of housing types to meet the housing needs of all income levels.*
- GV P3.2 *Support educational opportunities that promote balanced growth.*
- GV P3.3 *Ensure environmental justice regardless of race, ethnicity or income class.*
- GV P3.4 *Support local and state fiscal policies that encourage balanced growth*
- GV P3.5 *Encourage civic engagement.*

Principle 4: Promote sustainability for future generations.

- GV P4.1 *Preserve rural, agricultural, recreational, and environmentally sensitive areas*
- GV P4.2 *Focus development in urban centers and existing cities.*
- GV P4.3 *Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.*
- GV P4.4 *Utilize "green" development techniques*

CONCLUSION

As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA. We recommend that you review the SCAG List of Mitigation Measures for additional guidance, and encourage you to follow them, where applicable to your project. The SCAG List of Mitigation Measures may be found here: http://www.scag.ca.gov/igr/documents/SCAG_IGRMMRP_2008.pdf

SUGGESTED SIDE BY SIDE FORMAT - COMPARISON TABLE OF SCAG POLICIES

For ease of review, we would encourage the use of a side-by-side comparison of all SCAG policies with a discussion of the consistency, non-consistency or not applicable of the policy and supportive analysis in a table format. All policies and goals must be evaluated as to impacts. Suggested format is as follows:

The complete table can be found at: <http://www.scag.ca.gov/igr/>

- Click on **“Demonstrating Your Project’s Consistency With SCAG Policies”**
- Scroll down to **“Table of SCAG Policies for IGR”**

SCAG Regional Transportation Plan Goals and Compass Growth Visioning Principles		
Regional Transportation Plan Goals		
Goal/ Principle Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
RTP G1	Maximize mobility and accessibility for all people and goods in the region.	Consistent: Statement as to why Not-Consistent: Statement as to why or Not Applicable: Statement as to why
RTP G2	Ensure travel safety and reliability for all people and goods in the region.	Consistent: Statement as to why Not-Consistent: Statement as to why or Not Applicable: Statement as to why
RTP G3	Preserve and ensure a sustainable regional transportation system.	Consistent: Statement as to why Not-Consistent: Statement as to why or Not Applicable: Statement as to why
Etc.	Etc.	Etc.



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

November 19, 2009
CITY OF RANCHO CUCAMONGA

DEC 08 2009

RECEIVED - PLANNING

Mr. Corkran W. Nicholson
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Dear Mr. Nicholson:

Notice of Preparation of a Draft Environmental Impact Report (Draft EIR) for the Rancho Cucamonga General Plan Update Update

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental impact report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files. Electronic files include spreadsheets, database files, input files, output files, etc., and does not mean Adobe PDF files. Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.urbemis.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM_{2.5} emissions from construction and operational activities and processes. In connection with developing PM_{2.5} calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM_{2.5} emissions and compare the results to the recommended PM_{2.5} significance thresholds. Guidance for calculating PM_{2.5} emissions and PM_{2.5} significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

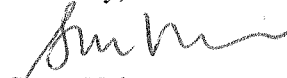
In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/aqguide/aqguide.html>. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: <http://www.arb.ca.gov/ch/handbook.pdf>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (<http://www.aqmd.gov>).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Daniel Garcia, Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,



Susan Nakamura
Planning Manager
Planning, Rule Development and Area Sources

SN:DG:AK
SBC091113-01AK
Control Number

Appendix B
Air Quality Assessment

**Air Quality Assessment For:
Rancho Cucamonga
General Plan Update
CITY OF RANCHO CUCAMONGA**

**Prepared For:
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**January 13, 2010
(Revised January 29, 2010)
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Table of Contents

1.0 Existing Air Quality	1
1.1 Project Description.....	1
1.2 Local, State, and Federal Air Quality Agencies.....	1
1.3 Criteria Pollutants, Health Effects, and Standards	5
1.4 South Coast Air Basin Air Quality Attainment Designations.....	10
1.5 Air Quality Management Plan (AQMP)	12
1.6 Climate.....	15
1.7 Monitored Air Quality	15
2.0 Potential Air Quality Impacts	18
2.1 Thresholds of Significance.....	18
2.1.1 <i>Regional Air Quality</i>	18
2.2 Short-Term Impacts	19
2.3 Long-Term Impacts.....	19
2.3.1 <i>Project Emissions Calculation Methodology</i>	19
2.3.2 <i>Project Operational Emissions</i>	20
2.3.3 <i>Diesel Particulate Matter Emissions</i>	22
2.4 Compliance with Air Quality Planning.....	22
2.4.1 <i>Consistency with AQMP</i>	22
3.0 Mitigation Measures.....	24
3.1 Long Term Impacts.....	24
3.1.1 <i>Regional Emissions</i>	24
4.0 Unavoidable Significant Impacts.....	26
4.1 Short-Term Impacts	26
4.2 Long-Term Impacts.....	26
Appendix A.....	28

List of Tables

Table 1	Ambient Air Quality Standards	7
Table 2	Designations of Criteria Pollutants for the SCAB.....	11
Table 3	Air Quality Levels Measured at the Upland/Fontana Monitoring Stations	18
Table 4	SCAQMD Regional Pollutant Emission Thresholds of Significance	19
Table 5	Total Daily Emissions.....	21
Table 8	Comparison of Project Emissions with SCAB Emissions	22

List of Exhibits

Exhibit 1	Vicinity Map	3
Exhibit 2	Project Site Plan	4

1.0 Existing Air Quality

1.1 Project Description

The City General Plan (G.P.) Update encompasses a total of approximately 14,016 acres. The G.P. Update Target Density will be analyzed since it has the most probable level of development. The Target Density consists of a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

The City's proposed General Plan Update identifies 21 land use designations which are divided into nine categories, including residential, commercial, mixed-use, industrial, public facilities, schools, parks, open space and conservations, and vacant lands. The G.P. Update will be compared with the existing conditions and Existing G.P..

The City of Rancho Cucamonga is located in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south and east, including the cities of Upland, Ontario and Fontana and a large area of unincorporated San Bernardino County to the east. The northernmost portion of the City's Sphere-of-influence is adjacent to the San Bernardino National Forest. The vicinity map is presented in Exhibit 1. The site plan illustrated in Exhibit 2.

This report analyzes the potential air quality impacts associated with this project. Regional air quality impacts from construction and operation of the proposed project are analyzed, as are potential local air quality impacts.

1.2 Local, State, and Federal Air Quality Agencies

The proposed project is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino counties and all of Orange County. The basin is bounded on the west by the Pacific Ocean and surrounded on the other sides by mountains. To the north lie the San Gabriel mountains, to the north and east the San Bernardino Mountains, to the southeast the San Jacinto Mountains and to the south the Santa Ana Mountains. The basin forms a low plain and the mountains channel and confine air flow which trap air pollutants.

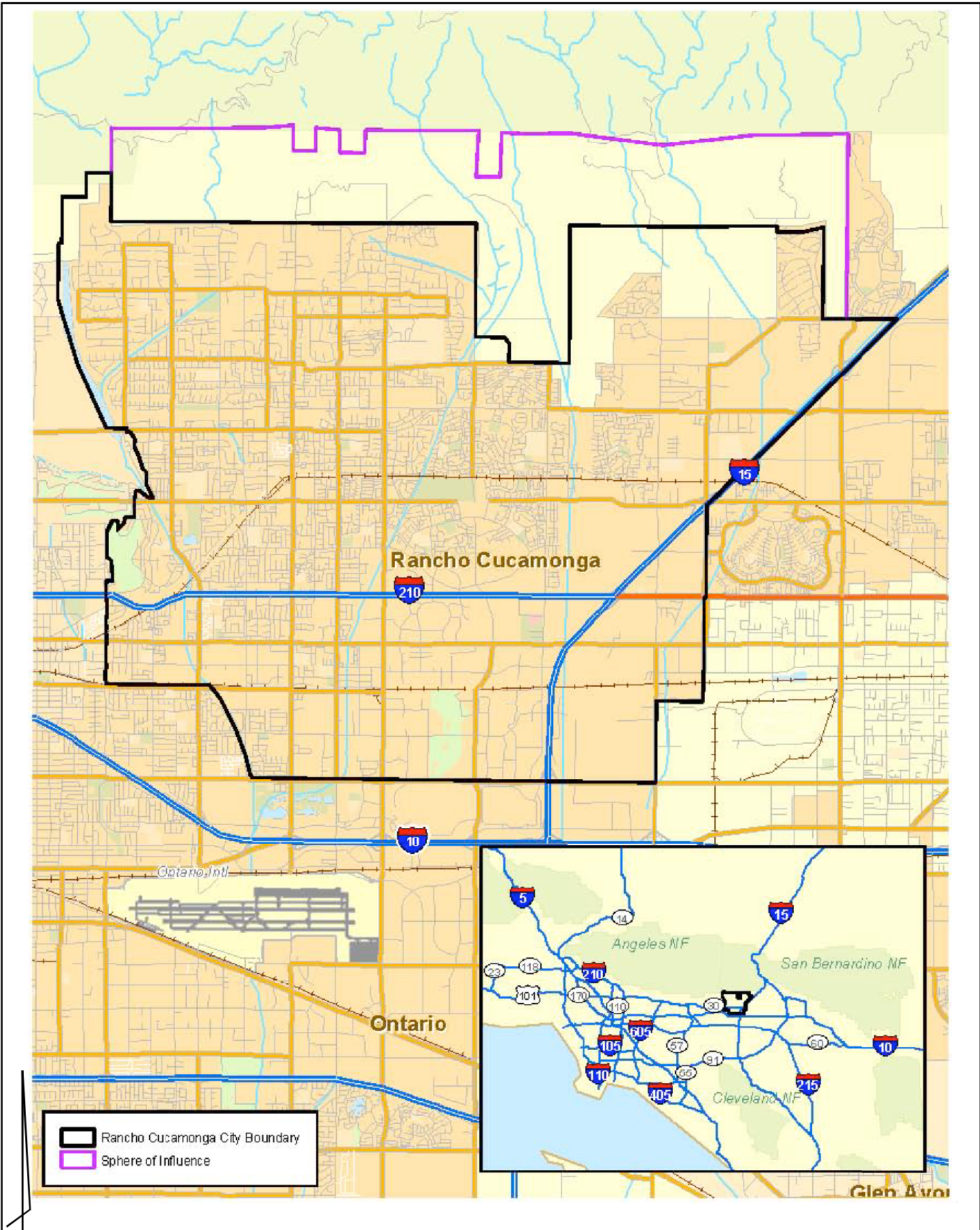
The primary agencies responsible for regulations to improve air quality in the SCAB are the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD, as it is the designated metropolitan planning authority for the area and produces estimates of anticipated future growth and vehicular travel in the basin which are used for air quality planning. The SCAQMD sets and enforces regulations for non-vehicular sources of air pollution in the basin and works with SCAG to develop and implement Transportation Control Measures (TCM). TCM measures are intended to reduce and improve vehicular travel and associated pollutant emissions.

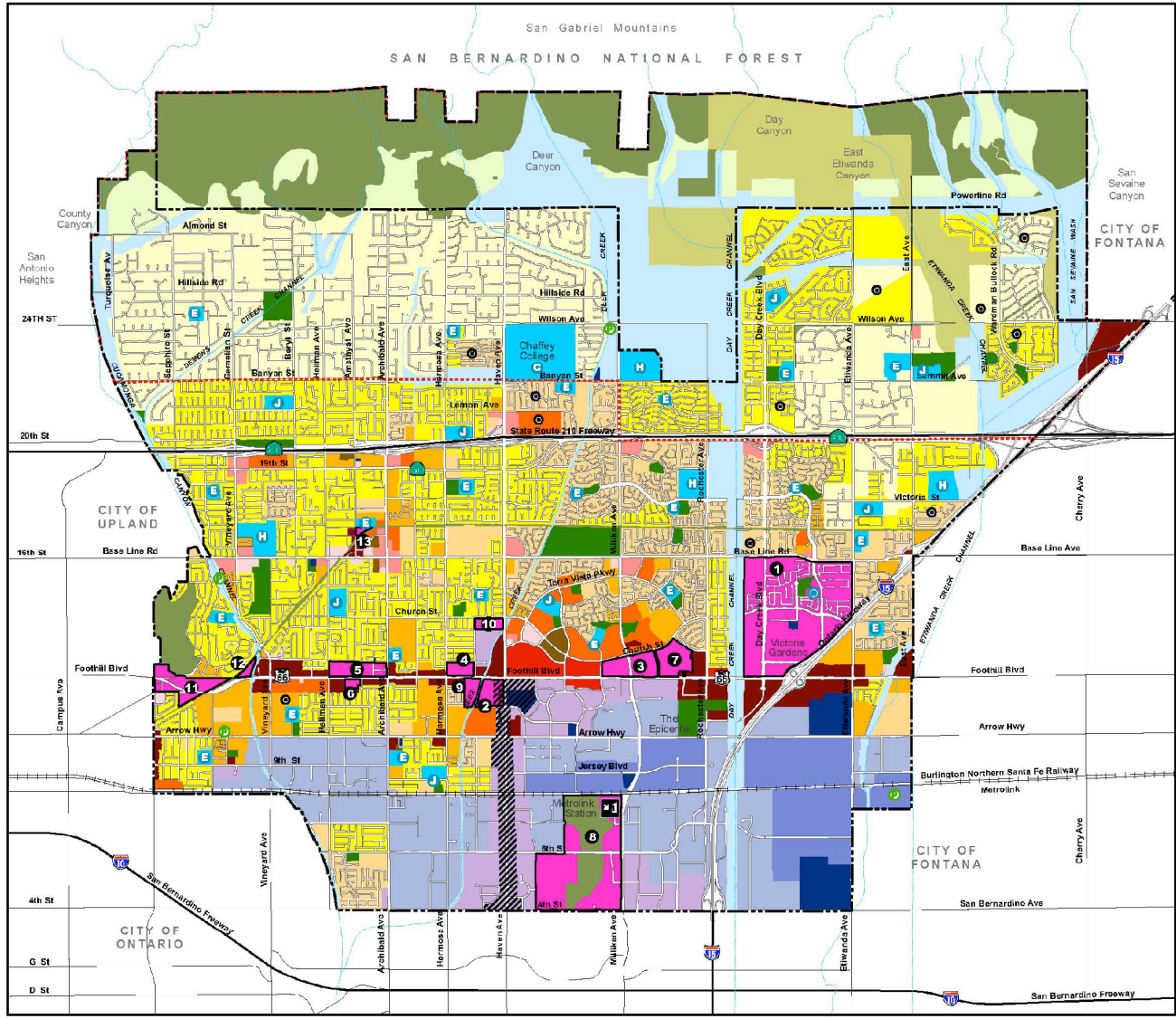
CARB was established in 1967 by the California Legislature to attain and maintain healthy air quality, conduct research into the causes and solutions to air pollution, and systematically attack the serious problem caused by motor vehicles, which are the major causes of air pollution in the State. CARB sets and enforces emission standards for motor vehicles, fuels, and consumer products. It sets the health based California Ambient Air Quality Standards (CAAQS) and

monitors air quality levels throughout the state. The board identifies and sets control measures for toxic air contaminants. The board also performs air quality related research, provides compliance assistance for businesses, and produces education and outreach programs and materials. CARB provides assistance for local air quality districts, such as SCAQMD.

The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

The California Clean Air Act (CCAA) required all air pollution control districts in the state to prepare a plan prior to December 31, 1994 to reduce pollutant concentrations exceeding the CAAQS and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years. The SCAQMD satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and SCAG in coordination with local governments and the private sector. The AQMP is incorporated into the SIP by CARB to satisfy the FCAA requirements discussed above. The AQMP is discussed further in Section 1.5.





Draft General Plan (2009)

Residential

- Very Low (Less than 2 du/ac)
- Low (2 to 4 du/ac)
- Low Medium (4 to 8 du/ac)
- Medium (8 to 14 du/ac)
- Medium High (14 to 24 du/ac)
- High (24 to 30 du/ac)

Commercial

- Office (Max. 1.00 FAR)
- Neighborhood Commercial (Max 0.35 FAR)
- Community Commercial (Max. 0.35 FAR)
- General Commercial (Max. 0.35 FAR)

Mixed Use

- Mixed Use (Max. 1.00 FAR)

Industrial

- Industrial Park (Max. 0.60 FAR)
- General Industrial (Max. 0.60 FAR)
- Heavy Industrial (Max. 0.50 FAR)

Open Space

- Hillside Residential (0.1 to 2 du/ac)
- Conservation
- Open Space (0 to 0.1 du/ac)
- Flood Control/Utility Corridor

Public Facility

- Civic/Regional (Max. 1.0 FAR)
- Schools (Max. 0.20 FAR)
- Parks

Schools and Parks

- Elementary School
- Junior High School
- High School
- College
- Proposed Elementary School
- Proposed Park

Overlays

- Haven Avenue Office Overlay
- Equestrian/Rural Area Overlay
- Master Plan Overlay

Mixed Use Areas

- Victoria Gardens
- Town Center at Haven and Foothill
- Terra Vista
- Foothill at Hemosa and Center
- Foothill at Archibald and Helman
- Foothill at Helms and Hampshire
- Foothill at Church and Mayten
- Empire Lakes
- Foothill at Deer Creek Channel
- Haven and Church
- Bear Gulch
- Foothill at Cucamonga Channel
- Alta Loma

Notes: 1. Location of proposed parks and schools are not fixed, and may be adjusted to accommodate future planning needs.

Source: Rancho Cucamonga and San Bernardino County Assessor, 2009.

August 19, 2009

Figure LU-X:
Draft Land Use Plan
 RANCHO CUCAMONGA GENERAL PLAN

1.3 Criteria Pollutants, Health Effects, and Standards

1.3.1 Criteria Pollutants and Standards

Under the Federal Clean Air Act (FCAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six major pollutants; ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), as well as lead. These six air pollutants are often referred to as the criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

Under the California Clean Air Act (CCAA), the California Air Resources Board has established California Ambient Air Quality Standards (CAAQS) to protect the health and welfare of Californians. State standards have been established for the six criteria pollutants as well as four additional pollutants; visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Table 1 presents the state and national ambient air quality standards. A brief explanation of each pollutant and their health effects is presented follows.

1.3.2 Ozone (O_3)

Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between volatile organic compounds (VOC) (also referred to as reactive organic gasses (ROG)) and nitrogen oxides (NO_x), which occur only in the presence of bright sunlight. Sunlight and hot weather cause ground-level ozone to form in the air. As a result, it is known as a summertime air pollutant. Ground-level ozone is the primary constituent of smog. Because ozone is formed in the atmosphere, high concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when ozone levels are unhealthy. Numerous scientific studies have linked ground-level ozone exposure to a variety of problems, including:

- lung irritation that can cause inflammation much like a sunburn;
- wheezing, coughing, pain when taking a deep breathe, and breathing difficulties during exercise or outdoor activities;
- permanent lung damage to those with repeated exposure to ozone pollution; and
- aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis.

Ground-level ozone can have detrimental effects on plants and ecosystems. These effects include:

- interfering with the ability of sensitive plants to produce and store food, making them more susceptible to certain diseases, insects, other pollutants, competition and harsh weather;
- damaging the leaves of trees and other plants, negatively impacting the appearance of urban vegetation, national parks, and recreation areas; and
- reducing crop yields and forest growth, potentially impacting species diversity in ecosystems.

1.3.3 Particulate Matter (PM_{10} & $PM_{2.5}$)

Particulate matter includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles smaller than 10 microns in size (PM_{10}) and smaller than or equal to 2.5 microns ($PM_{2.5}$). The size of the particulate matter is referenced to the aerodynamic diameter of the particulate. Smaller particulates are of greater concern because they can penetrate deeper into the lungs than large particles.

The principal health effect of airborne particulate matter is on the respiratory system. Short term exposures to high $PM_{2.5}$ levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long term exposures to high $PM_{2.5}$ levels are associated with premature mortality and development of chronic respiratory disease. Short-term exposures to high PM_{10} levels are associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms and possible premature mortality. The EPA has concluded that available evidence does not suggest an association between long-term exposure to PM_{10} at current ambient levels and health effects.

$PM_{2.5}$ is directly emitted in combustion exhaust and formed from atmospheric reactions between of various gaseous pollutants including nitrogen oxides (NO_x) sulfur oxides (SO_x) and volatile organic compounds (VOC). PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or the re suspension of dusts most typically through construction activities and vehicular travels. $PM_{2.5}$ can remain suspended in the atmosphere for days and weeks and can be transported long distances. PM_{10} generally settles out of the atmosphere rapidly and are not readily transported over large distances.

**Table 1
Ambient Air Quality Standards**

Pollutant	Averaging Time	State Standards ^{1,3}	Federal Standards ²	
			Primary ^{3,5}	Secondary ^{3,6}
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	--	--
	8 Hour	0.070 ppm (137 µg/m ³)	0.075 ppm (147 µg/m ³)	Same as Primary
Respirable Particulate Matter (PM ₁₀) ⁸	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM ⁶	20 µg/m ³	--	Same as Primary
Fine Particulate Matter (PM _{2.5}) ⁸	24 Hour	--	35 µg/m ³	Same as Primary
	AAM ⁶	12 µg/m ³	15.0 µg/m ³	Same as Primary
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	--	--
Nitrogen Dioxide (NO ₂)	AAM ⁶	0.030 ppm (56 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
	1 Hour	0.18 ppm (338 µg/m ³)	100 ppb ¹⁰	--
Sulfur Dioxide (SO ₂)	AAM ⁶	--	0.030 ppm (80 µg/m ³)	--
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	--
	3 Hour	--	--	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	--	--
Lead ⁹	Rolling 3-Month Average	0.15 µg/m ³	--	--
	Quarterly Average	--	1.5 µg/m ³	Same as Primary
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km -- visibility ≥ 10 miles (0.07 per km -- ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride ⁷	24 Hour	0.01 ppm (26 µg/m ³)		

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded.

2. National standards (other than ozone, PM₁₀, PM_{2.5}, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

6. Annual Arithmetic Mean

7. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

8. On September 21, 2006 EPA published a final rule revoking the annual 50 µg/m³ PM₁₀ standard and lowering the 24-hour PM_{2.5} standard from 65 µg/m³. On March 12, 2008 EPA lowered the 8-hour Ozone standard to 0.075 ppm from 0.08 ppm. Attainment designations are to be issued in December, 2009 by March 2010 with attainment plans due April, 2010 by March, 2013.

-- No Standard

9. Final rule signed October 15, 2008.

10. Parts per billion (3 year average of 98th percentile of maximum daily 1-hour concentration, January 22, 2010).

1.3.4 Carbon Monoxide (CO)

Carbon monoxide is a colorless and odorless gas, which in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Carbon monoxide combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High carbon monoxide concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. Carbon monoxide concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow-moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of carbon monoxide are limited to locations within a relatively short distance (i.e., up to 600 feet or 185 meters) of heavily traveled roadways. Overall carbon monoxide emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

1.3.5 Nitrogen Dioxide (NO₂)

Nitrogen gas, normally relatively inert (unreactive), comprises about 80% of the air. At high temperatures (i.e., in the combustion process) and under certain other conditions it can combine with oxygen, forming several different gaseous compounds collectively called nitrogen oxides (NO_x). Nitric oxide (NO) and nitrogen dioxide (NO₂) are the two most important compounds. Nitric oxide is converted to nitrogen dioxide in the atmosphere. Nitrogen dioxide (NO₂) is a red-brown pungent gas. Motor vehicle emissions are the main source of NO_x in urban areas.

Nitrogen dioxide is toxic to various animals as well as to humans. Its toxicity relates to its ability to form nitric acid with water in the eye, lung, mucus membrane and skin. In animals, long-term exposure to nitrogen oxides increases susceptibility to respiratory infections lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO₂ can suffer lung irritation and potentially, lung damage. Epidemiological studies have also shown associations between NO₂ concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

NO_x is a combination of primarily NO and NO₂. While the NAAQS only addresses NO₂, NO and the total group of nitrogen oxides is of concern. NO and NO₂ are both precursors in the formation of ozone and secondary particulate matter as discussed in Sections 1.3.2 and 1.3.5. Because of this and that NO emissions largely convert to NO₂, NO_x emissions are typically examined when assessing potential air quality impacts.

1.3.6 Sulfur Dioxide (SO₂)

Sulfur oxides (SO_x) constitute a class of compounds of which sulfur dioxide (SO₂) and sulfur trioxide (SO₃) are of greatest importance. Ninety-five percent of pollution related SO_x emissions are in the form of SO₂. SO_x emissions are typically examined when assessing potential air quality impacts of SO₂. Combustion of fossil fuels for generation of electric power is the primary contributor of SO_x emissions. Industrial processes, such as nonferrous metal smelting, also contribute to SO_x emissions. SO_x is also formed during combustion of motor fuels. However, most of the sulfur has been removed from fuels greatly reducing SO_x emissions from vehicles.

SO₂ combines easily with water vapor, forming aerosols of sulfurous acid (H₂SO₃), a colorless, mildly corrosive liquid. This liquid may then combine with oxygen in the air, forming the even more irritating and corrosive sulfuric acid (H₂SO₄). Peak levels of SO₂ in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term

exposures to high levels of SO₂ gas and particles cause respiratory illness and aggravate existing heart disease. SO₂ reacts with other chemicals in the air to form tiny sulfate particles which are measured as PM_{2.5}. The health effects of PM_{2.5} are discussed in Section 1.3.

1.3.7 Lead (Pb)

Lead is a stable compound, which persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming or hematopoietic, the nervous, and the renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and decline in production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e. lead smelters) and are not applied to transportation projects.

1.3.8 Visibility Reducing Particulates

Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The Statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. A separate standard for visibility-reducing particles that is applicable only in the Lake Tahoe Air Basin is based on reduction in scenic quality.

1.3.9 Sulfates(SO₄²⁻)

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and / or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO₂) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The ARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

1.3.10 Hydrogen Sulfide (H₂S)

Hydrogen sulfide (H₂S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. It can also be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H₂S at levels above the standard will result in exposure to a very disagreeable odor. In 1984, an ARB committee concluded that the ambient standard for H₂S is adequate to protect public health and to significantly reduce odor annoyance.

1.3.11 Vinyl Chloride (Chloroethene)

Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans.

1.4 South Coast Air Basin Air Quality Attainment Designations

Based on monitored air pollutant concentrations, the U.S. EPA and CARB designate areas relative to their status in attaining the NAAQS and CAAQS respectively. Table 2 lists the current attainment designations for the SCAB. For the Federal standards, the required attainment date is also shown. The Unclassified designation indicates that the air quality data for the area does not support a designation of attainment or nonattainment.

Table 2
Designations of Criteria Pollutants for the SCAB

Pollutant	Federal	State
Ozone (O ₃)	Severe-17 Nonattainment	Nonattainment
8-Hour Ozone	Extreme Nonattainment	
Respirable Particulate Matter (PM ₁₀)	Serious Nonattainment (2006)	Nonattainment
Fine Particulate Matter (PM _{2.5})	Nonattainment (2015)	Nonattainment
Carbon Monoxide (CO)	Attainment/Maintenance (2000)	Attainment
Nitrogen Dioxide (NO ₂)	Attainment/Maintenance (1995)	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Attainment	Attainment
Visibility Reducing Particles	n/a	Unclassified
Sulfates	n/a	Unclassified
Hydrogen Sulfide	n/a	Attainment
Vinyl Chloride	n/a	Attainment

Table 2 shows that the U.S. EPA has designated SCAB as Severe-17 non-attainment for ozone, serious non-attainment for PM₁₀, non-attainment for PM_{2.5}, and attainment/maintenance for CO and NO₂. The basin has been designated by the state as non-attainment for ozone, PM₁₀, and PM_{2.5}. For the federal designations, the qualifiers, Severe-17 and Serious, affect the required attainment dates as the federal regulations have different requirements for areas that exceed the standards by greater amounts at the time of attainment/non-attainment designation.

The SCAB is designated as in attainment of the Federal SO₂ and lead NAAQS as well as the state CO, NO₂, SO₂, lead, hydrogen sulfide, and vinyl chloride CAAQS.

In July 1997, U.S. EPA issued a new ozone NAAQS of 0.08 ppm using an 8-hour averaging time. Implementation of this standard was delayed by several lawsuits. Attainment/non-attainment designations for the new 8-hour ozone standard were issued on April 15, 2004 and became effective on June 15, 2005. The SCAB was designated severe-17 non-attainment, which

requires attainment of the Federal Standard by June 15, 2021. As a part of the designation, the EPA announced that the 1-hour ozone standard would be revoked in June of 2005. Thus, the 8-hour ozone standard attainment deadline of 2021 supercedes and replaces the previous 1-hour ozone standard attainment deadline of 2010.

The SCAQMD and CARB requested that U.S. EPA change the nonattainment status of the 8-hour ozone standard to extreme and this request was granted in August 2009. This change of classifications extends the attainment date by three years to 2024 but also requires the SCAQMD to incorporate more stringent air quality regulations such as lower permitting thresholds and implementing reasonably available control technologies at more sources. This change also allows for the use of undefined reductions (i.e. "black box") based on the anticipated development of new control technologies or improvement of existing technologies in the attainment plan.

On March 12, 2008, U.S. EPA announced that it was lowering the 8-hour average NAAQS for ozone to 0.075 ppm. Attainment/non-attainment designations for the revised standard are to be issued in 2009 with attainment plans due four years later. Non-attainment areas will be required to meet the standards by deadlines that may vary based on the severity of the problem in the area that will be determined at time of attainment/non-attainment designation.

On April 28, 2005, CARB adopted an 8-hour ozone standard of 0.070 ppm. The California Office of Administrative Law approved the rulemaking and filed it with the Secretary of State on April 17, 2006. The standard became effective on May 17, 2006. California has retained the 1-hour concentration standard of 0.09 ppm. To be redesignated as attainment by the state the basin will need to achieve both the 1-hour and 8-hour ozone standards.

The SCAB was designated as moderate non-attainment of the PM₁₀ standards when the designations were initially made in 1990 with a required attainment date of 1994. In 1993, the basin was redesignated as serious non-attainment with a required attainment date of 2006 because it was apparent that the basin could not meet the PM₁₀ standard by the 1994 deadline. At this time, the Basin has met the PM₁₀ standards at all monitoring stations except the western Riverside where the annual PM₁₀ standard has not been met. However, on September 21, 2006, the U.S. EPA announced that it was revoking the annual PM₁₀ standard as research had indicated that there were no considerable health effects associated with long-term exposure to PM₁₀. With this change, the basin is technically in attainment of the federal PM₁₀ standards although the redesignation process has not yet begun.

In July 1997, U.S. EPA issued NAAQS for fine particulate matter (PM_{2.5}). The PM_{2.5} standards include an annual standard set at 15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), based on the three-year average of annual mean PM_{2.5} concentrations and a 24-hour standard of 65 $\mu\text{g}/\text{m}^3$, based on the three-year average of the 98th percentile of 24-hour concentrations. Implementation of these standards was delayed by several lawsuits. On January 5, 2005, EPA took final action to designate attainment and nonattainment areas under the NAAQS for PM_{2.5} effective April 5, 2005. The SCAB was designated as non-attainment with an attainment required as soon as possible but no later than 2010. EPA may grant attainment date extensions of up to five years in areas with more severe PM_{2.5} problems and where emissions control measures are not available or feasible. It is likely that the SCAB will need this additional time to attain the standard

On September 21, 2006, the U.S. EPA announced that the 24-hour PM_{2.5} standard was lowered to 35 $\mu\text{g}/\text{m}^3$. The EPA announced attainment/non-attainment designations for the revised PM_{2.5} standard on November 13, 2009 with an effective date of December 14, 2009. The SCAB was found to be in non-attainment of the standard. The SCAQMD has three years from the effective date to submit a plan demonstrating attainment of the standard by April 2015, although an extension of up to five years could be granted by the U.S. EPA.

The Federal attainment deadline for CO was to be December 31, 2000 but at that time the basin still had measured exceedances of the CO NAAQS. The basin was granted an extension to attain the standard and has not had any violations of the federal CO standards since 2002. In March 2005, the South Coast AQMD adopted a CO Redesignation Request and Maintenance Plan. On May 11, 2007, the U.S. EPA announced approval of the Redesignation Request and Maintenance Plan and that, effective June 11, 2007, the SCAB would be re-designated as attainment/maintenance for the federal CO NAAQS. The plan provides for maintenance of the federal CO air quality standard until at least 2015 and commits to revising the Plan in 2013 to ensure maintenance through 2025.

The federal annual NO₂ standard was met for the first time in 1992 and has not been exceeded since. The SCAB was redesignated as attainment for NO₂ in 1998. On January 22, 2010, the EPA announced a new 1-hour NO₂ standard of 100 ppb (3 year average of 98th percentile of maximum daily 1 hour concentration). The existing annual 53 ppm standard will remain.

Currently there is only one county (Cook County Illinois) with measured levels that exceed the standard. However, the new standard requires new monitors to be located within 50 meters of the busiest roadways. These monitors are to be operating by January 1, 2013.

Initial attainment designations are to be issued by January 2012. However, EPA expects that most areas will be designated unclassifiable until three years of monitoring conforming with the new monitoring requirements is completed in 2016 or 2017. As that data comes in areas will be redesignated attainment or non-attainment.

Table 2 shows that SCAB is designated as in attainment of the SO₂ and lead NAAQS as well as the state CO, NO₂, SO₂, lead, hydrogen sulfide, and vinyl chloride CAAQS.

1.5 Air Quality Management Plan (AQMP)

As, discussed above, the CAA requires plans to demonstrate attainment of the NAAQS for which an area is designated as nonattainment. Further, the CCAA requires SCAQMD to revise its plan to reduce pollutant concentrations exceeding the CAAQS every three years. In the SCAB, SCAQMD and SCAG, in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the air basin to satisfy these requirements. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards.

The 2003 AQMP is the current Federally approved applicable air plan for ozone. The 2003 AQMP was adopted locally on August 1, 2003, by the governing board of the SCAQMD. CARB adopted the plan as part of the California State Implementation Plan on October 23, 2003. The PM₁₀ attainment plan from the 2003 AQMP received final approval from the U.S. EPA on November 14, 2005 with an effective date of December 14, 2005. As of February 14, 2007 the U.S. EPA had not acted on the ozone attainment plan of the 2003 AQMP. On this date, CARB announced that it was rescinding the ozone attainment plan from the 2003 AQMP with the intention to expedite approval of the 2007 AQMP. However, on March 10, 2009 the U.S. EPA announced partial approval and partial disapproval of the ozone attainment plan of the 2003 AQMP effective April 9, 2009. The portions disapproved by the U.S. EPA were determined to not be required by the FCAA because they represented revisions to previously approved AQMP elements. Even with the disapproved elements the 2003 AQMP satisfied the requirements of the EPA and did not trigger sanction clocks. The 2007 AQMP was adopted by the SCAQMD on June 1, 2007. CARB adopted the plan as a part of the California State Implementation Plan on

September 27, 2007. The State Implementation Plan was submitted to the U.S. EPA on November 16, 2007. The U.S. EPA has not taken action on the 2007 AQMP at this time.

The 2007 AQMP was prepared in response to the implementation of the federal PM_{2.5} and 8-hour ozone NAAQS. The implementation of the new standards required completion of plan addressing attainment of the 8-hour ozone standard by June of 2007 and completion of a plan addressing the PM_{2.5} standard one year later, in April of 2008. SCAQMD determined that it was most prudent to prepare an integrated plan to address both pollutants. The attainment date for the PM_{2.5} NAAQS is earlier (i.e., 2015) than the attainment date for the ozone NAAQS (i.e., 2021) and the district felt that delaying a plan for PM_{2.5} by a year could jeopardize the basin's ability to attain the standard. Further, development of a plan for ozone would have likely focused on lowering VOC emissions, which would have no effect on PM_{2.5} levels. Reductions in NO_x emissions result in reductions in both ozone and PM_{2.5} levels.

The 2007 AQMP demonstrates attainment of the 65 µg/m³ 24-hour average and 15µg/m³ annual average PM_{2.5} standards by the 2015 deadline. However, it should be noted that in September of 2006, the U.S. EPA lowered the 24-hour PM_{2.5} NAAQS to 35 µg/m³. An attainment plan for the revised standard will need to be completed by December 14, 2013. The deadline for meeting the revised standard will not change (i.e., April 2015) but five year extensions to attain the standard may be granted by the U.S. EPA.

The 2007 AQMP determined that the basin would not be able to achieve the 0.08-ppm 8-hour ozone standard by the 2021 deadline without the use of "black box" measures. "Black box" measures anticipate the development of new technologies or improving existing control technologies that are not well defined at the time the plan is prepared. However, the use of "black box" measures is not allowed for areas with a Severe-17 non-attainment designation. Because of this the SCAQMD and CARB requested to the U.S. EPA to "bump up" the basin's classification to Extreme with the submittal of the 2007 AQMP. This request was granted in August 2009 and will extend the required attainment date to 2024 and allow the use of "black box" measures. The "black box:" reductions needed for ozone attainment are estimated to be 190 tons per day (tpd) of NO_x and 27 tpd of VOC. These reductions represent a 17% reduction in 2002 average daily NO_x emissions and a 3% reduction in 2002 average daily VOC emissions.

It should be noted that on March 12, 2008, the U.S. EPA lowered the 8-hour ozone standard to 0.075 ppm. This effectively lowers the standard 0.009 ppm as 0.084 ppm is considered meeting the 0.08 ppm standard. A plan to attain the revised standard will need to be completed by 2013. Attainment deadlines for the revised standard have not been established and may vary depending on the severity of the exceedances.

Implementation of the 2007 AQMP is based on a series of control measures and strategies that vary by source type (i.e., stationary or mobile) as well as by the pollutant that is being targeted. Short-term and mid-term control measures are defined to achieve the PM_{2.5} standard by 2015. These measures are designed to also contribute to reductions in ozone levels. Additional, long-term measures are defined to attain the 8-hour ozone standard by 2024. The measures rely on actions to be taken by several agencies that have statutory authority to implement such measures. Each control measure will be brought for regulatory consideration in a specified time frame. Control measures deemed infeasible will be substituted by other measures to achieve the total emission reduction target for each agency.

The plan focuses on control of sulfur oxides (SO_x), directly emitted PM_{2.5}, and nitrogen oxides (NO_x) to achieve the PM_{2.5} standard. Achieving the 8-hour ozone standard builds upon the PM_{2.5} attainment strategy with additional NO_x and VOC reductions. The control measures in the 2007 AQMP are based on facility modernization, energy efficiency and conservation, good management practices, market incentives/compliance flexibility, area source programs, emission growth management and mobile source programs. In addition, CARB has developed a plan of

control strategies for sources controlled by CARB (i.e. on-road and off-road motor vehicles and consumer products). Further, Transportation Control Measures (TCM) defined in SCAG's Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) are needed to attain the standards.

The 2007 AQMP includes 30 short-term and mid-term stationary and 7 mobile source control measures proposed for implementation by the district that are applicable to sources under their jurisdiction. Nine of these measures were included in the 2003 AQMP and have been updated or revised. Twenty-eight new measures are proposed based on replacement of the District's long-term reduction measures from the 2003 AQMP with more defined control measures or development of new control measures. Measures include; regulations to reduce VOC emissions from coatings, solvents, petroleum operations, and cutback asphalt; measures to reduce emissions from industrial combustion sources as well as residential and commercial space heaters; a measure to offset potential emission increases due to changes in natural gas specifications; localized control of PM emission hot spots; regulation of wood burning fireplaces and wood stoves; reductions from under-fired char broilers; reducing urban heat island through lighter colored roofing, and paving materials and tree planting programs; energy efficiency and conservation programs; and emission reduction from new or redevelopment projects through regulations that will establish mitigation options to be implemented in such project. The specific measures are discussed in Chapter 4 and presented in detail in Appendix IV-A of the 2007 AQMP.

The TCMs defined in the RTP and RTIP fall into three categories, High Occupancy Vehicle measures, Transit and System Management Measures and Information-based Transportation Strategies. The High Occupancy Vehicle (HOV) Strategy attempts to reduce the proportion of commute trips made by single occupancy vehicles which constitute 72% of all home work trips according to the 200 U.S. Census. Specific measures include new HOV lanes on existing and new facilities, HOV to HOV bypasses and High Occupancy Toll (HOT) lanes. The Transit and Systems Management Strategy incentivize the use of transit, alternative transportation modes (e.g., pedestrian and bicycles), and increases in average vehicle occupancy by facilitating vanpools, smart shuttles and similar strategies. Systems management measures include grade separation and traffic signal synchronization projects. The information-based Transportation Strategy relies primarily on the innovative provision of information in a manner that successfully influences the ways in which individuals use the regional transportation system. Providing ride matching to increase ride-sharing and carpool trips and providing near real-time estimates of congestion in an effort to influence persons to defer traveling to a less congested period are examples of the strategy.

In addition to District's measures and SCAG's TCMs, the Final 2007 AQMP includes additional short- and mid-term control measures aimed at reducing emissions from sources that are primarily under state and federal jurisdiction including on-road and off-road mobile sources, and consumer products. Measures committed to be enacted by CARB include (1) improvements to the smog check program, (2) cleaner in-use heavy duty truck emission regulations, (3) increased regulations on goods movement sources including ships, harbor craft, and port trucks, (4) regulations for cleaner in-use off-road equipment including agricultural equipment, (5) various measures to reduce evaporative VOC emissions from fuel storage and dispensing, (6) tightened emission standards and product reformulation for consumer products that emit VOC's, and (7) reductions in emissions from pesticide applications.

Four long-term "black box" control approaches are presented in the 2007 AQMP. These measures include (1) further reductions from on-road sources by retiring or retrofitting older high-emitting vehicles and accelerated penetration of very low and zero emission vehicles, (2) increased inspection and maintenance (I/M) programs for heavy-duty diesel trucks, (3) further reductions from off-road mobile sources through accelerated turn-over of existing equipment,

retrofitting existing equipment and new engine emission standards, and (4) further reductions from consumer product VOC emissions.

The 2007 AQMP identifies four contingency measures that would need to be implemented if milestone emission targets are not met or if the standards are not attained by the required date. While implementation of these measures is expected to reduce emissions, there are issues that limit the viability of these measures as AQMP control measures. These issues include the availability of District resources to implement and enforce the measure, cost-effectiveness of the measure, potential adverse environmental impacts, effectiveness of emission reductions, and availability of methods to quantify emission reductions.

1.6 Climate

The climate in and around the project area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, excepting the summer months, which commonly bring substantially higher temperatures. In all portions of the basin, temperatures well above 100 degrees F. have been recorded in recent years. The annual average temperature in the basin is approximately 62 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Ground based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin (SCAB) and is responsible for the high levels of ozone observed during summer months in the air basin.

1.7 Monitored Air Quality

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the SCAB have been made for existing emissions ("2007 Air Quality Management Plan", June 2007). The data indicate that on-road (e.g.; automobiles, busses and trucks) and off-road (e.g.; trains, ships, and construction equipment) mobile sources are the major source of current emissions in the SCAB. Mobile sources account for approximately 64% of VOC emissions, 92% of NO_x emissions, 39% of direct PM_{2.5} emissions, 59% of SO_x emissions and 98% of CO emissions. Area sources (e.g., architectural coatings, residential water heaters, and

consumer products) account for approximately 30% of VOC emissions and 32% of direct PM_{2.5} emissions. Point sources (e.g., chemical manufacturing, petroleum production, and electric utilities) account for approximately 38% of SO_x emissions. Entrained road dust account for approximately 20% of direct PM_{2.5} emissions.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project is in the area represented by measurements made at the Upland monitoring station. The Upland station is located approximately 4 miles west of the project site. The pollutants measured at the Upland include ozone, carbon monoxide (CO), PM_{2.5}, and nitrogen dioxide (NO₂). The air quality data monitored from 2006 to 2008 are presented in Table 3.

PM₁₀ and sulfur dioxide (SO₂) are not monitored at the Upland station. The next nearest monitoring site to the project is the Fontana-Arrow Highway monitoring site located in the approximately 11 miles east of the project site. The air quality data monitored from 2006 to 2008 for the Fontana-Arrow Highway station is presented in Table 3.

The monitoring data presented in Table 3 were obtained from the CARB air quality data website (www.arb.ca.gov/adam/). Federal and State air quality standards are also presented in the Tables.

Table 3
Air Quality Levels Measured at the Upland/Fontana-Arrow Highway Monitoring Stations

Pollutant	California Standard	National Standard	Year	% Msrd. ¹	Max. Level	Days State Standard Exceeded ²	Days National Standard Exceeded ²
Ozone 1 Hour Average	0.09 ppm	0.12 ppm ⁴	2008	94	0.155	51	9
			2007	96	0.145	32	7
			2006	99	0.166	52	14
Ozone 8 Hour Average	0.070 ppm	0.08 ppm	2008	94	0.122	65	50
			2007	96	0.115	55	35
			2006	99	0.131	64	50
Respirable Particulates PM ₁₀ 24 Hour Average	50 µg/m ³	150 µg/m ³	2008	99	75.0	73	0
			2007	98	276	209	13.2
			2006	99	142	176	0
Respirable Particulates PM ₁₀ ⁵ AAM ³	20 µg/m ³	None	2008	99	40.2	Yes	n/a
			2007	98	60.7	Yes	n/a
			2006	99	53.7	Yes	n/a
Fine Particulates PM _{2.5} ⁵ 24 Hour Average	None	65 µg/m ³	2008	66	49.0	n/a	-
			2007	90	77.5	n/a	-
			2006	88	52.6	n/a	27
Fine Particulates PM _{2.5} AAM ³	12 µg/m ³	15 µg/m ³	2008	66	15.4	Yes	Yes
			2007	90	18.8	Yes	Yes
			2006	88	17.5	Yes	Yes
CO 1 Hour Average	20 ppm	35 ppm	2008	97	-	0	0
			2007	97	-	0	0
			2006	98	-	0	0
CO 8 Hour Average	9.0 ppm	9 ppm	2008	97	1.59	0	0
			2007	97	1.65	0	0
			2006	98	1.90	0	0
NO ₂ 1 Hour Average	0.18 ppm	100 ppb ⁶	2008	95	0.094	0	--
			2007	78	0.095	0	--
			2006	90	0.100	0	--
NO ₂ AAM ³	0.030 ppm	0.053 ppm	2008	95	0.023	No	0
			2007	78	0.027	No	0
			2006	90	0.031	Yes	0
SO ₂ 24 Hour Average	0.04 ppm	0.14 ppm	2008	96	0.003	No	No
			2007	95	0.004	No	No
			2006	98	0.003	No	No
SO ₂ AAM ³	None	0.030 ppm	2008	96	0.001	n/a	No
			2007	95	0.001	n/a	No
			2006	98	0.001	n/a	No

1. Percent of year where high pollutant levels were expected that measurements were made

2. For annual averaging times a yes or no response is given if the annual average concentration exceeded the applicable standard. For the PM₁₀ 24 hour standard, daily monitoring is not performed. The number shown in Days State Standard Exceeded if measurements were taken every day.

3. Annual Arithmetic Mean

4. With the implementation of the federal 8-hour ozone standard, the 1-hour standard was revoked as of June 15, 2005. The previous standard is provided for informational purposes.

5. On September 21, 2006 U.S. EPA announced that it was revoking the annual average PM₁₀ standard and lowering the 24-hour PM_{2.5} standard to 35 µg/m³. The previous standards are presented as the new standards are not fully implemented at this time.

6. Parts per billion (3 year average of 98th percentile of maximum daily 1-hour concentration, January 22, 2010).

2. For annual averaging times a yes or no response is given if the annual average concentration exceeded the applicable standard. For the PM₁₀24 hour standard, daily monitoring is not performed. The number shown in Days State Standard Exceeded if measurements were taken every day.

The monitoring data presented in Table 3 show that ozone and particulate matter (PM₁₀ and PM_{2.5}) are the air pollutants of primary concern in the project area.

The State 1-hour ozone standard was exceeded 51 days in 2008, 32 days in 2007, and 52 days in 2008 at the Upland station. The Federal 1-hour ozone standard was exceeded 9 days in 2008, 7 days in 2007, and 14 days in 2008. The State 8-hour ozone standard was exceeded between 55 and 65 days each year over the past three years. The Federal 8-hour ozone standard was exceeded between 35 and 50 days in each of the past three years. There does not appear to be a distinct trend in either maximum ozone concentrations or days of exceedances in the area.

The State 24-hour concentration standards for PM₁₀ was exceeded 73 days in 2008, 209 days in 2007, and 176 days in 2008 at the Fontana station. The Federal 24-hour PM₁₀ standard was exceeded 13 days in 2007, but has not been exceeded in 2006 and 2008. The State annual average standard has been exceeded each of the past three years. There does not appear to be a noticeable trend in either maximum particulate concentrations or days of exceedances in the area. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

The Federal 24 hour standard for PM_{2.5} was exceeded 27 days in 2007 at the Fontana Station. Complete PM_{2.5} data for 2007 and 2008 were not accorded at the Fontana Station. Note that on September 21, 2006 U.S. EPA revised the standard to 35 µg/m³. However, since designations for the revised standards will not be made until April 2010 only the number of days exceeding the original standard of 65 µg/m³ are reported here.

The annual average PM_{2.5} concentration has exceeded both the State and Federal standards for the past three years at the Fontana Station. There does not appear to be a noticeable trend in either maximum particulate concentrations or days of exceedances in the area.

The annual average NO₂ concentration has exceeded the State standard in 2006, but not in 2007 and 2008.

The monitored data shown in Table 3 show that other than ozone, NO₂, PM₁₀ and PM_{2.5} exceedances as mentioned above, no State or Federal standards were exceeded for the remaining criteria pollutants.

2.0 Potential Air Quality Impacts

Air quality impacts are usually divided into short term and long term. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with the buildout condition for the proposed General Plan.

2.1 Thresholds of Significance

2.1.1 Regional Air Quality

In their "1993 CEQA Air Quality Handbook", the SCAQMD has established significance thresholds to assess the impact of project related air pollutant emissions. Table 4 presents these significance thresholds. There are separate thresholds for short-term construction and long-term

operational emissions. A project with daily emission rates below these thresholds are considered to have a less than significant effect on air quality. It should be noted the thresholds recommended by the SCAQMD are very small and subject to controversy. It is up to the individual lead agencies to determine if the SCAQMD thresholds are appropriate for their projects. The project will comply with the SCAQMD significant thresholds. These thresholds are summarized in Table 5 below.

Table 4
SCAQMD Regional Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs/day)					
	CO	VOC	NOx	PM10	PM2.5	SOx
<i>Construction</i>	550	75	100	150	55	150
<i>Operation</i>	550	55	55	150	55	150

2.2 Short-Term Impacts

The General Plan update does not involve specific construction activity. However, construction activities that implement land use policies over the long term will produce air pollutant emissions. Air pollutants will primarily be emitted by construction equipment and fugitive dust will be generated during demolition of the existing improvements as well as during grading and excavation of the site.

The City General Plan (G.P.) Update encompasses a total of approximately 14,016 acres. The proposed G.P. Update Target Density has the most probable level of development, and therefore, will be addressed. The Target Density entails a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

Construction activities that implement land use policies associated with the G.P. Update over the long term will produce air quality emissions. No specific project development are proposed at this time and specific details regarding the scheduling of grading activities are unknown, and therefore, the construction emissions cannot be quantified. Construction emissions will need to be evaluated on a project-by-project basis, when more construction details are developed.

2.3 Long-Term Impacts

2.3.1 Project Emissions Calculation Methodology

The proposed G.P. Update GHG emissions were calculated using the URBEMIS2007 program (version 9.2.4). The program was set to calculate emissions for the entire proposed G.P. Update. Default URBEMIS2007 variables were used for the calculations including the trip generation rates. Hearth emissions were also estimated using URBEMIS default assumptions. The project's land uses were obtained from the City of Rancho Cucamonga, revised December 2009. The Target Density scenario was analyzed because it has the most probable level of development.

The proposed G.P. Update (Target Density) comprises a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of

parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

URBEMIS2007 calculates summer and winter average emissions in pounds per day. The land uses in terms of dwelling units and square footages as well as default emission factors utilized in calculating the emissions are provided in the appendix.

2.3.2 Project Operational Emissions

The primary source of GHG emissions generated will be from motor vehicles. Other emissions from the project will be generated from the combustion of natural gas for space and water heating, as well as off-site GHG emissions from the generation of electricity consumed by the project over the long term.

The project emissions were analyzed for the Target Density scenario for buildout year 2030. For the purpose of comparison, the 2009 Existing Conditions and 2030 Existing G.P. were also calculated. Based on the land use data, there will be a decrease of 213 residential units when comparing Existing G.P. to Existing Conditions. However, the number of residential units in the proposed G.P. Update exceeds the Existing Conditions by 7,584 units, and the current G.P. forecast by 7,797 units. The results of the project emissions are presented in Table 5. The project net changes in emissions are also presented relative to Existing Conditions and Existing G.P. The data utilized in calculating the emissions are provided in the appendix.

Table 5 presents the results of the URBEMIS2007 model showing the maximum daily air pollutant emissions. The primary source of regional emissions generated by the proposed project will be from motor vehicles. Hearth emissions from wood burning stoves and fireplaces would also be significant. While hearth emissions calculated utilizing the URBEMIS default assumptions are very high, it is the best methodology available to use. Hearth URBEMIS default assumptions were adjusted to account for an increase of 7,797 new residential units over Existing G.P. assuming all new residences would utilize natural gas fireplaces. In general, emissions are substantially higher than it would be without hearth emissions, specifically for CO, VOC, PM₁₀ and PM_{2.5}. For example, of the total G.P. Update emissions, hearth emissions represent 32% of CO, 48% for VOC, 73% for PM₁₀ and 81% for PM_{2.5}. Other emissions will be generated from the combustion of natural gas for water and space heating, the use of landscaping equipment, and architectural coatings during maintenance; these emissions will be secondary. The specific data utilized in calculating the emissions are provided in the appendix.

Table 5
Total Daily Emissions (Pounds Per Day)

Source	CO	VOC	NOx	PM ₁₀	PM _{2.5}	SOx
<u>Existing 2009</u>						
Vehicular Emissions	174,696	16,741	29,123	1,646	1,137	130
Natural Gas Combustion	458	71	930	2	2	0
Hearth	24,192	8,724	747	3,752	3,612	68
Landscaping	0	0	0	0	0	0
Consumer Products	0	2,856	0	0	0	0
Architectural Coatings	0	632	0	0	0	0
Total Emissions:	199,345	29,024	30,799	5,400	4,750	198
<u>Existing G.P. (2030)</u>						
Vehicular Emissions	57,118	6,610	7,435	1,507	965	148
Natural Gas Combustion	516	75	990	2	2	0
Hearth	24,097	8,691	739	3,737	3,597	68
Landscaping	0	0	0	0	0	0
Consumer Products	0	2,845	0	0	0	0
Architectural Coatings	0	762	0	0	0	0
Total Emissions:	81,731	18,984	9,164	5,245	4,564	215
<u>Proposed G.P. Update (2030)</u>						
Vehicular Emissions	58,725	6,795	7,640	1,548	991	152
Natural Gas Combustion	562	84	1,103	2	2	0
Hearth	26,451	8,973	838	4,121	3,967	76
Landscaping	0	0	0	0	0	0
Consumer Products	0	3,245	0	0	0	0
Architectural Coatings	0	768	0	0	0	0
Total Emissions	85,739	19,865	9,581	5,671	4,960	227
<i>Significance Threshold</i>	<i>550</i>	<i>55</i>	<i>55</i>	<i>150</i>	<i>55</i>	<i>150</i>
Net Change in Emissions over Existing G.P. (2030):	4,008	881	416	426	396	12
Net Change in Emissions over (2009) Existing Conditions:	-113,607	-9,159	-21,218	271	210	30

Table 5 shows that the total project net change in emissions will increase relative to the Existing G.P. (2030), but will decrease significantly for CO, VOC, and NOx relative to the 2009 Existing conditions. In general, the future emissions primarily due to vehicular emissions are projected to be less in 2030 when compared to 2009. This is primarily due to the anticipated decrease in the future emission rates for vehicular sources as projected by the EMFAC2007 program. The number of vehicles actually will increase in the future but is more than offset by the decrease in the emission factors. However, the net increases in 2030 emissions associated with implementation of the G.P. Update when compared to Existing G.P. are above the SCAQMD Thresholds for most criterion pollutants. Since the project net increases in emissions are above

the significance thresholds, the project will result in a significant regional air quality impact. Long-term mitigation measures are recommended in Section 3.0.

Table 6 compares the project net increase in emissions to the projected basin wide emissions from the 2007 AQMP. This comparison shows that the project represents a very small fraction of the total regional emissions. The project net increase in emissions represent approximately less than half of a percent of the total regional emissions.

Table 6
Comparison of Project Net Increase in Emissions with SCAB Emissions

	Pollutant Emissions (tons/day)					
	CO	VOC	NO _x	PM ₁₀	PM _{2.5}	SO _x
G.P. Update Net Increase in Emissions	2.00	0.44	0.21	0.21	0.20	0.01
2023 South Coast Air Basin*	2,147	95	539	508	318	102
Project as Percentage of Basin	0.093%	0.464%	0.039%	0.042%	0.062%	0.006%

* Source: 2007 AQMP Table 3-5A except PM₁₀ from 2003 AQMP Tables 3-5A and 3-5B

2.3.3 Diesel Particulate Matter Emissions

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). Diesel fueled vehicles emit DPM from nearby freeways or rail yards could be a problem for any residential areas within 500 feet of freeways and 1,000 feet of rail yards or related distribution centers. TAC impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.)

There are no rail yards in the City of Rancho Cucamonga. Additionally, there are no new residential areas proposed next to freeways. As a result, no new TAC impacts are anticipated for the project.

2.4 Compliance with Air Quality Planning

The following sections deal with the major air planning requirements for this project. Specifically, consistency of the project with the AQMP is addressed. As discussed below, consistency with the AQMP is an issue to address for significant air quality impact contained in CEQA Guidelines and the SCAQMD CEQA Air Quality Handbook.

2.4.1 Consistency with AQMP

An EIR must discuss any inconsistencies between the proposed project and applicable GPs and regional plans (California Environmental Quality Act (CEQA) guidelines (Section 15125)). Regional plans that apply to the proposed project include the South Coast Air Quality Management Plan (AQMP). In this regard, this section will discuss any inconsistencies between the proposed project with the AQMP.

The purpose of the consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with

the region's ability to comply with Federal and State air quality standards. If the decision-maker determines that the project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD's CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (except as provided for CO in Section 9.4 for relocating CO hot spots).
- (2) Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

The proposed project will increase regional emissions, and will increase regional emissions by an amount greater than the SCAQMD thresholds (Refer to Section 2.3.2). However, the consistency criteria pertains to local air quality impacts, rather than regional emissions, as defined by the SCAQMD. The SCAQMD has identified CO as the best indicator pollutant for determining whether air quality violations would occur, as CO hot-spot is most directly related to increase in traffic. Nevertheless, the air basin is now in attainment for the CO standards and exceedances of the CO standards are not expected, and local air quality impact modeling is no longer performed. Local air pollutant concentrations would not be expected to exceed the ambient air quality concentration standards due to local traffic, with or without the project. Because the project is not projected to impact the local air quality, the project is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the project with the assumptions in the AQMP. Thus, the emphasis of this criterion is to insure that the analyses conducted for the project are based on the same forecasts as the AQMP. The Regional Comprehensive Plan and Guide (RCP&G) consists of three sections: Core Chapters, Ancillary Chapters, and Bridge Chapters. The Growth Management, Regional Mobility, Air Quality, Water Quality, and Hazardous Waste Management chapters constitute the Core Chapters of the document. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA.

Since the SCAG forecasts are not detailed, the test for consistency of this project is not specific. The AQMP assumptions are based upon projections from local general plans. Projects that are consistent with the local general plan are consistent with the AQMP assumptions. Although the proposed G.P. Update land use designations have not changed significantly from the 2009

Existing Conditions and the existing G.P., the proposed land uses are more intensive. There will be a decrease of 213 residential units when comparing Existing G.P. to Existing Conditions. However, the number of residential units in the proposed G.P. Update exceeds the Existing Conditions by 7,584 units, and the current G.P. forecast by 7,797 units. Utilizing URBEMIS default assumptions and the proposed land use data, the average daily trips are projected to be 1,412,574 for the Existing Conditions, 1,582,731 for the Existing G.P, and 1,627,907 for the proposed G.P. Update. As a result, the proposed G.P. Update will generate net increase of 215,333 daily trips over the 2009 Existing Conditions, and 45,177 daily trips (less than 3% increase) over existing G.P. As such, the change in the project traffic is not accounted for in the existing G.P., and thus the AQMP. The project must be considered inconsistent with the AQMP because of this increase in traffic. Therefore, the second criterion is not met for consistency with the AQMP.

3.0 Mitigation Measures

3.1 Long Term Impacts

3.1.1 Regional Emissions

Air pollutant net increase in emissions associated with the proposed G.P. Update was shown to exceed the threshold of significance. Mitigation is required.

The most significant reductions in regional and local air pollutant emissions are attainable through programs which reduce the vehicular travel associated with the project. Support and compliance with the AQMP for the basin is the most important measure to achieve this goal. The AQMP includes improvement of mass transit facilities and implementation of vehicular usage reduction programs and energy conservation measures. These measures have not been included in the emissions calculations, but if implemented, would result in emission reductions which are not accounted for; however, it is not feasible at this stage to quantify them. It is recommended that all feasible and relevant mitigation measures be incorporated in the project to the greatest extent feasible:

Transportation Demand Management (TDM) Measures

1. Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides. Presumably, this measure would improve traffic flow into and out of the parking lot. The air quality benefits are incalculable because more specific data is required.
2. Provide dedicated turn lanes as appropriate and provide roadway improvements at heavily congested roadways. Again, the areas where this measure would be applicable are intersections in the City. Presumably, these measures would improve traffic flow. Emissions would drop as a result of the higher traffic speeds, but to an unknown extent.
3. Provide on-site services. Provide incentives such as on-site ATMs and other similar measures that address lifestyle needs. These measures reduce the vehicle mile traveled (VMT), but the air quality benefit can not be quantified because more specific data is required.
4. Provide local shuttle and transit shelters, and ridematching services. This measure is recommended, but no information is available regarding its effectiveness in improving air quality. Such a program might reduce the VMT associated with the project. No evidence is available that VMT will be reduced by any significant amount, however.
5. Provide bicycle lanes, storage areas, and amenities, and ensure efficient parking management. This measure includes implementing the formation of bike clubs and providing additional bike racks, lockers, showers, bike repair areas, and loaner bikes. Also, provide lockers, showers, safe walk path

maps, walk clubs and free walking shoes. These measures are essential, but no data is available regarding the effectiveness of this package of measures. Quantification of air quality benefits is not possible because of this fact.

6. Synchronize traffic signals. The areas where this measure would be applicable are roadway intersections within the project area. This measure would be more effective if the roadways beyond the project limits are synchronized as well. The air quality benefits are incalculable because more specific data is required.
7. Encourage the use of alternative fuel or low emission vehicles to comply with the AQMP On-Road Mobile M2 measure, and Off-Road Mobile Sources M9 and M10 measures. The technology required for this measure is slow in progress, and may not be practically applied to the project at this time. The air quality benefits are incalculable because more specific data is required.
8. Employers should provide ridematching, guaranteed ride home, or car pool or vanpool to employees as a part of the TDM program and to comply with the AQMP Transportation Improvements TCM-01 measure. This measure is applicable to commercial uses of the project.
9. Introduce window glazing, wall insulation, and efficient ventilation methods. The Uniform Building Code already requires the construction of buildings with features that minimize energy use.
10. Employers should provide compensation, prizes or awards to ridesharers. This measure is applicable to commercial uses, which are a minimal part of the project.
11. Provide preferential parking to high occupancy vehicles and shuttle services. Also, designate additional car pool or vanpool parking. This measure is applicable to commercial uses, which are a minimal part of the project.
12. Employers should provide variable work hours and telecommuting to employees to comply with the AQMP Advanced Transportation Technology ATT-01 and ATT-02 measures. These measures allow employees to have compressed work weeks, flex-time, staggered work hours, or work out of their homes. This measure is applicable to commercial uses, which are a minimal part of the project.
13. Provide dedicated parking spaces with electrical outlets for electrical vehicles. This measure would accommodate electric car charging if any electric cars are driven by employees or customers. This measure is applicable to commercial uses, which are a minimal part of the project.
14. Develop a trip reduction plan to comply with SCAQMD Rule 2202. SCAQMD Rule 2202 has revamped the requirements for carpooling. In general, mandatory carpooling is no longer required. Compliance with Rule 2202 will be mandatory. This measure is applicable to commercial uses, which are a minimal part of the project.
15. Schedule truck deliveries and pickups during off-peak hour. This will alleviate traffic congestion, therefore, emissions during the peak hour. This measure is applicable to commercial uses, which are a minimal part of the project.

Energy Efficient Measures

16. Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors. Reducing the need to heat or cool structures by improving thermal integrity will result in a reduced expenditure of energy and a reduction in pollutant emissions. The air quality benefit depends upon the extent of the reduction of energy expenditure which is unknown in this case. The air quality benefit is also unknown, therefore.
17. Install energy efficient street lighting. Implementation of this measure is not feasible because of varying definitions of the phrase "energy efficient."
18. Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits. The connection between reducing water consumption and improving air quality is

non-existent in the context of this analysis. A measure designed to reduce water consumption has no place in an air quality mitigation package. The assertion that such vegetation would provide "passive solar benefits" is false because drought resistant vegetation lacks both the height and the fullness to shade the building structures. No air quality benefit will occur as a result of the implementation of this measure.

19. Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure. This measure reduces the need for cooling energy in the summer.
20. Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations.
21. Provide incentives for solid waste recycling. The connection between solid waste recycling and air quality is a tenuous one at best. There will be no air quality benefit resulting from the encouragement or coercion to recycle solid waste. Provisions of AB 939 are still relative as a required waste reduction measure.
22. Implement energy conservation measures beyond state and local requirements. This measure is simply too vague to be implemented.
23. Use devices that minimize the combustion of fossil fuels. This is another measure that is lacking specifics, such as a definition for the terms "devices" and "minimize."
24. Capture waste heat and reemploy it in nonresidential buildings. This measure is applicable to commercial buildings which are a minimal part of the project.
25. Introduce window glazing, wall insulation, and efficient ventilation methods. The construction of buildings with features that minimize energy use is already required by the Uniform Building Code.
26. Encourage the use of double paned windows to reduce thermal loss, and/or provide high performance glass and window coverings at residential and commercial buildings reduce HVAC loads.
27. Eliminate wood burning stoves/fireplaces and replace with natural gas hearth options.

4.0 Unavoidable Significant Impacts

4.1 Short-Term Impacts

Construction activities that implement land use policies associated with the G.P. Update over the long term will produce air quality emissions. No specific project development are proposed at this time and specific details regarding the scheduling of grading activities are unknown. Construction emissions will need to be evaluated on a project-by-project basis, when more construction details are developed to determine whether there is a significant impact. If a short-term air quality impact is determined to be significant, then mitigation measures are required by SCAQMD Rules to reduced construction emissions and should be implemented on a project-by-project basis.

4.2 Long-Term Impacts

The analysis demonstrates that the long term net increase in emissions associated with the G.P. Update will exceed the SCAQMD thresholds, and therefore, mitigation measures required by SCAQMD should be implemented to the greatest extent possible. The project emissions with the recommended measures will be reduced to an extent. Based on URBEMIS calculations, the

reduction in emissions with mitigation would generally be marginal between 5% and 10% at best. However, the net increase in emissions would continue to exceed the SCAQMD thresholds and be considered significant and unavoidable.

Appendix A

URBEMIS Output Files

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSvcShare\RnchCucamongaEX.urb924

Project Name: Rancho Cucamonga Existing Conditions

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	3,863.05	945.70	2,151.09	0.09	6.27	6.21	1,178,010.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	15,234.85	24,594.39	178,563.13	153.18	1,646.36	1,136.95	15,014,959.18

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	19,097.90	25,540.09	180,714.22	153.27	1,652.63	1,143.16	16,192,969.43

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	71.11	929.73	457.79	0.01	1.76	1.74	1,175,404.81
Hearth - No Summer Emissions							
Landscape	303.93	15.97	1,693.30	0.08	4.51	4.47	2,605.44
Consumer Products	2,855.82						
Architectural Coatings	632.19						
TOTALS (lbs/day, unmitigated)	3,863.05	945.70	2,151.09	0.09	6.27	6.21	1,178,010.25

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	3,867.24	6,136.47	45,281.70	38.34	411.52	284.46	3,755,796.73
Apartments low rise	268.43	414.61	3,059.42	2.59	27.80	19.22	253,756.92
Condo/townhouse general	1,286.80	1,987.55	14,666.38	12.42	133.29	92.14	1,216,472.10
High school	303.33	499.90	3,563.82	3.09	33.31	22.98	303,519.13
City park	7.37	8.50	60.36	0.05	0.57	0.39	5,151.63
Free-standing discount superstore	755.63	1,305.29	9,250.84	8.06	86.79	59.87	790,579.29
Regnl shop. center	1,982.92	3,416.93	24,216.47	21.09	227.21	156.73	2,069,547.30
Strip mall	453.65	781.73	5,540.28	4.83	51.98	35.86	473,474.25
General office building	473.32	771.21	5,587.37	4.81	51.69	35.69	471,416.62
Government office building	791.39	1,370.35	9,769.28	8.48	91.31	63.00	832,019.07
Government (civic center)	605.81	1,031.34	7,352.49	6.38	68.72	47.42	626,188.25
General light industry	4,085.98	6,430.78	46,979.04	40.26	432.35	298.60	3,944,700.70
General heavy industry	352.98	439.73	3,235.68	2.78	29.82	20.59	272,337.19
TOTALS (lbs/day, unmitigated)	15,234.85	24,594.39	178,563.13	153.18	1,646.36	1,136.95	15,014,959.18

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2009 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
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Single family housing	12,026.67	9.57	dwelling units	36,080.00	345,285.59	3,488,351.24
Apartments low rise	211.31	6.90	dwelling units	3,381.00	23,328.90	235,687.21
Condo/townhouse general	1,013.00	6.90	dwelling units	16,208.00	111,835.20	1,129,848.67
High school		12.89	1000 sq ft	2,378.00	30,652.42	283,994.67
City park		1.59	acres	334.00	531.06	4,823.35
Free-standing discount superstore		49.21	1000 sq ft	1,677.00	82,525.17	740,498.31
Regnl shop. center		42.94	1000 sq ft	5,031.00	216,031.13	1,938,447.28
Strip mall		42.94	1000 sq ft	1,151.00	49,423.94	443,480.98
General office building		11.01	1000 sq ft	3,925.10	43,215.35	439,824.25
Government office building		68.93	1000 sq ft	1,219.00	84,025.67	778,497.81
Government (civic center)		27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry		6.97	1000 sq ft	49,160.00	342,645.19	3,674,869.67
General heavy industry		1.50	1000 sq ft	13,224.00	19,836.00	253,603.26
					1,412,574.42	13,997,834.16

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.2	1.7	98.1	0.2
Light Truck < 3750 lbs	10.0	4.0	91.0	5.0
Light Truck 3751-5750 lbs	20.7	1.0	99.0	0.0
Med Truck 5751-8500 lbs	11.2	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.1	70.7	29.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	7.7	84.6	7.7

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High school				10.0	5.0	85.0
City park				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\RnchCucamongaEX.urb924

Project Name: Rancho Cucamonga Existing Conditions

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	12,283.43	1,676.27	24,649.75	67.90	3,753.31	3,613.28	2,175,943.20

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	16,740.72	29,122.88	174,695.65	130.00	1,646.36	1,136.95	13,709,152.59

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	29,024.15	30,799.15	199,345.40	197.90	5,399.67	4,750.23	15,885,095.79

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	71.11	929.73	457.79	0.01	1.76	1.74	1,175,404.81
Hearth	8,724.31	746.54	24,191.96	67.89	3,751.55	3,611.54	1,000,538.39
Landscaping - No Winter Emissions							
Consumer Products	2,855.82						
Architectural Coatings	632.19						
TOTALS (lbs/day, unmitigated)	12,283.43	1,676.27	24,649.75	67.90	3,753.31	3,613.28	2,175,943.20

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	4,227.70	7,267.65	44,252.67	32.57	411.52	284.46	3,430,381.24
Apartments low rise	288.79	491.03	2,989.89	2.20	27.80	19.22	231,770.52
Condo/townhouse general	1,384.40	2,353.93	14,333.08	10.55	133.29	92.14	1,111,072.66
High school	336.17	591.74	3,502.12	2.62	33.31	22.98	277,026.31
City park	6.69	10.06	59.40	0.04	0.57	0.39	4,701.67
Free-standing discount superstore	861.14	1,544.83	9,111.77	6.83	86.79	59.87	721,500.92
Regnl shop. center	2,256.40	4,044.01	23,852.42	17.89	227.21	156.73	1,888,716.66
Strip mall	516.22	925.19	5,456.99	4.09	51.98	35.86	432,103.53
General office building	521.96	913.28	5,456.13	4.08	51.69	35.69	430,387.03
Government office building	903.85	1,622.09	9,600.15	7.19	91.31	63.00	759,395.87
Government (civic center)	684.74	1,220.81	7,225.19	5.41	68.72	47.42	571,531.10
General light industry	4,417.94	7,617.17	45,727.88	34.17	432.35	298.60	3,601,885.60
General heavy industry	334.72	521.09	3,127.96	2.36	29.82	20.59	248,679.48
TOTALS (lbs/day, unmitigated)	16,740.72	29,122.88	174,695.65	130.00	1,646.36	1,136.95	13,709,152.59

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2009 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

<u>Land Use Type</u>	<u>Acreage</u>	<u>Trip Rate</u>	<u>Unit Type</u>	<u>No. Units</u>	<u>Total Trips</u>	<u>Total VMT</u>
Single family housing	12,026.67	9.57	dwelling units	36,080.00	345,285.59	3,488,351.24
Apartments low rise	211.31	6.90	dwelling units	3,381.00	23,328.90	235,687.21
Condo/townhouse general	1,013.00	6.90	dwelling units	16,208.00	111,835.20	1,129,848.67

High school	12.89	1000 sq ft	2,378.00	30,652.42	283,994.67
City park	1.59	acres	334.00	531.06	4,823.35
Free-standing discount superstore	49.21	1000 sq ft	1,677.00	82,525.17	740,498.31
Regnl shop. center	42.94	1000 sq ft	5,031.00	216,031.13	1,938,447.28
Strip mall	42.94	1000 sq ft	1,151.00	49,423.94	443,480.98
General office building	11.01	1000 sq ft	3,925.10	43,215.35	439,824.25
Government office building	68.93	1000 sq ft	1,219.00	84,025.67	778,497.81
Government (civic center)	27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry	6.97	1000 sq ft	49,160.00	342,645.19	3,674,869.67
General heavy industry	1.50	1000 sq ft	13,224.00	19,836.00	253,603.26
				1,412,574.42	13,997,834.16

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.2	1.7	98.1	0.2
Light Truck < 3750 lbs	10.0	4.0	91.0	5.0
Light Truck 3751-5750 lbs	20.7	1.0	99.0	0.0
Med Truck 5751-8500 lbs	11.2	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.1	70.7	29.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	7.7	84.6	7.7

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

High school	10.0	5.0	85.0
City park	5.0	2.5	92.5
Free-standing discount superstore	2.0	1.0	97.0
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government office building	10.0	5.0	85.0
Government (civic center)	10.0	5.0	85.0
General light industry	50.0	25.0	25.0
General heavy industry	90.0	5.0	5.0

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\RnchCucamonga ExGP-Target.urb924

Project Name: Rancho Cucamonga Existing General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	3,958.21	1,007.80	2,054.08	0.08	5.96	5.91	1,249,442.06

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	6,143.92	6,254.74	59,786.51	174.11	1,506.75	964.62	17,112,537.01

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	10,102.13	7,262.54	61,840.59	174.19	1,512.71	970.53	18,361,979.07

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	75.44	990.41	515.54	0.01	1.87	1.85	1,246,966.11
Hearth - No Summer Emissions							
Landscape	275.41	17.39	1,538.54	0.07	4.09	4.06	2,475.95
Consumer Products	2,844.89						
Architectural Coatings	762.47						
TOTALS (lbs/day, unmitigated)	3,958.21	1,007.80	2,054.08	0.08	5.96	5.91	1,249,442.06

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	1,293.43	1,301.65	12,658.83	36.35	314.73	201.90	3,571,335.65
Apartments low rise	108.20	105.02	1,021.36	2.93	25.39	16.29	288,148.71
Condo/townhouse general	507.71	492.78	4,792.40	13.76	119.15	76.44	1,352,041.49
Elementary school	38.81	40.82	385.48	1.13	9.80	6.26	111,303.47
Junior high school	28.73	30.12	284.40	0.84	7.23	4.62	82,119.79
High school	23.47	24.45	229.14	0.68	5.85	3.74	66,445.80
Junior college (2 yrs)	76.13	82.84	773.16	2.28	19.77	12.63	224,713.00
City park	3.23	2.14	19.94	0.06	0.51	0.33	5,795.64
Racquetball/health	10.67	11.69	109.09	0.32	2.79	1.78	31,706.47
Free-standing discount superstore	289.31	320.52	2,983.99	8.83	76.40	48.79	868,508.49
Regnl shop. center	800.67	884.10	8,230.78	24.35	210.75	134.59	2,395,619.73
Strip mall	165.29	182.51	1,699.12	5.03	43.51	27.78	494,539.24
General office building	511.53	527.73	5,035.26	14.71	127.25	81.43	1,445,485.31
Office park	103.50	107.27	1,031.79	3.00	25.96	16.63	294,867.46
Government (civic center)	273.77	297.99	2,792.51	8.23	71.25	45.53	809,776.52
General light industry	1,313.74	1,297.47	12,494.86	36.32	314.21	201.24	3,568,460.98
General heavy industry	161.80	118.14	1,148.54	3.35	28.92	18.52	328,570.63
Industrial park	433.93	427.50	4,095.86	11.94	103.28	66.12	1,173,098.63
TOTALS (lbs/day, unmitigated)	6,143.92	6,254.74	59,786.51	174.11	1,506.75	964.62	17,112,537.01

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,292.33	9.57	dwelling units	33,877.00	324,202.88	3,275,356.85
Apartments low rise	236.94	6.90	dwelling units	3,791.00	26,157.90	264,268.04
Condo/townhouse general	1,111.75	6.90	dwelling units	17,788.00	122,737.20	1,239,989.40
Elementary school		14.49	1000 sq ft	736.00	10,664.64	102,700.48
Junior high school		13.78	1000 sq ft	571.00	7,868.38	75,772.50
High school		12.89	1000 sq ft	514.00	6,625.46	61,384.89
Junior college (2 yrs)		27.49	1000 sq ft	832.00	22,871.68	207,732.02
City park		1.59	acres	371.00	589.89	5,357.68
Racquetball/health		32.93	1000 sq ft	98.00	3,227.14	29,310.50
Free-standing discount superstore		49.21	1000 sq ft	1,819.00	89,512.99	803,200.01
Regnl shop. center		42.94	1000 sq ft	5,750.00	246,904.99	2,215,478.40
Strip mall		42.94	1000 sq ft	1,187.00	50,969.78	457,351.80
General office building		11.01	1000 sq ft	11,883.00	130,831.83	1,331,540.96
Office park		11.42	1000 sq ft	2,230.00	25,466.60	271,270.23
Government (civic center)		27.92	1000 sq ft	2,892.00	80,744.64	748,099.07
General light industry		6.97	1000 sq ft	43,908.00	306,038.75	3,282,265.61
General heavy industry		1.50	1000 sq ft	15,751.00	23,626.50	302,064.81
Industrial park		6.96	1000 sq ft	14,898.00	103,690.08	1,079,906.26
					1,582,731.33	15,753,049.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0
High school	10.0	5.0	85.0
Junior college (2 yrs)	5.0	2.5	92.5
City park	5.0	2.5	92.5
Racquetball/health	5.0	2.5	92.5
Free-standing discount superstore	2.0	1.0	97.0
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Office park	48.0	24.0	28.0
Government (civic center)	10.0	5.0	85.0
General light industry	50.0	25.0	25.0
General heavy industry	90.0	5.0	5.0
Industrial park	41.5	20.8	37.8

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\RnchCucamonga ExGP-Target.urb924

Project Name: Rancho Cucamonga Existing General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	12,373.44	1,729.24	24,612.87	67.61	3,738.67	3,599.19	2,237,481.40

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	6,610.18	7,435.10	57,118.00	147.83	1,506.75	964.62	15,597,804.13

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18,983.62	9,164.34	81,730.87	215.44	5,245.42	4,563.81	17,835,285.53

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	75.44	990.41	515.54	0.01	1.87	1.85	1,246,966.11
Hearth	8,690.64	738.83	24,097.33	67.60	3,736.80	3,597.34	990,515.29
Landscaping - No Winter Emissions							
Consumer Products	2,844.89						
Architectural Coatings	762.47						
TOTALS (lbs/day, unmitigated)	12,373.44	1,729.24	24,612.87	67.61	3,738.67	3,599.19	2,237,481.40

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	1,388.29	1,547.47	12,092.62	30.89	314.73	201.90	3,256,394.04
Apartments low rise	113.95	124.86	975.68	2.49	25.39	16.29	262,738.05
Condo/townhouse general	534.67	585.84	4,578.04	11.69	119.15	76.44	1,232,810.43
Elementary school	42.40	48.52	368.82	0.96	9.80	6.26	101,428.32
Junior high school	31.33	35.80	272.11	0.71	7.23	4.62	74,833.89
High school	25.49	29.05	219.73	0.57	5.85	3.74	60,543.34
Junior college (2 yrs)	84.60	98.42	742.30	1.94	19.77	12.63	204,738.55
City park	2.82	2.54	19.14	0.05	0.51	0.33	5,280.47
Racquetball/health	11.90	13.89	104.74	0.27	2.79	1.78	28,888.13
Free-standing discount superstore	324.60	380.79	2,867.06	7.49	76.40	48.79	791,276.87
Regnl shop. center	896.68	1,050.33	7,908.25	20.66	210.75	134.59	2,182,590.63
Strip mall	185.11	216.82	1,632.54	4.26	43.51	27.78	450,562.62
General office building	553.68	627.39	4,802.98	12.49	127.25	81.43	1,317,451.12
Office park	112.40	127.55	981.87	2.55	25.96	16.63	268,783.50
Government (civic center)	304.42	354.08	2,677.85	6.99	71.25	45.53	737,843.13
General light industry	1,390.95	1,542.88	11,886.26	30.84	314.21	201.24	3,252,855.06
General heavy industry	148.31	140.58	1,085.82	2.84	28.92	18.52	299,525.62
Industrial park	458.58	508.29	3,902.19	10.14	103.28	66.12	1,069,260.36
TOTALS (lbs/day, unmitigated)	6,610.18	7,435.10	57,118.00	147.83	1,506.75	964.62	15,597,804.13

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 60 Season: Winter

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,292.33	9.57	dwelling units	33,877.00	324,202.88	3,275,356.85
Apartments low rise	236.94	6.90	dwelling units	3,791.00	26,157.90	264,268.04
Condo/townhouse general	1,111.75	6.90	dwelling units	17,788.00	122,737.20	1,239,989.40
Elementary school		14.49	1000 sq ft	736.00	10,664.64	102,700.48
Junior high school		13.78	1000 sq ft	571.00	7,868.38	75,772.50
High school		12.89	1000 sq ft	514.00	6,625.46	61,384.89
Junior college (2 yrs)		27.49	1000 sq ft	832.00	22,871.68	207,732.02
City park		1.59	acres	371.00	589.89	5,357.68
Racquetball/health		32.93	1000 sq ft	98.00	3,227.14	29,310.50
Free-standing discount superstore		49.21	1000 sq ft	1,819.00	89,512.99	803,200.01
Regnl shop. center		42.94	1000 sq ft	5,750.00	246,904.99	2,215,478.40
Strip mall		42.94	1000 sq ft	1,187.00	50,969.78	457,351.80
General office building		11.01	1000 sq ft	11,883.00	130,831.83	1,331,540.96
Office park		11.42	1000 sq ft	2,230.00	25,466.60	271,270.23
Government (civic center)		27.92	1000 sq ft	2,892.00	80,744.64	748,099.07
General light industry		6.97	1000 sq ft	43,908.00	306,038.75	3,282,265.61
General heavy industry		1.50	1000 sq ft	15,751.00	23,626.50	302,064.81
Industrial park		6.96	1000 sq ft	14,898.00	103,690.08	1,079,906.26
					1,582,731.33	15,753,049.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5
Racquetball/health				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0
Industrial park				41.5	20.8	37.8

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\URBEMIS_PROJECTS\RnchCucamonga2030GP-2Target.urb924

Project Name: Rancho Cucamonga Proposed General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	4,421.52	1,123.68	2,368.27	0.09	6.89	6.81	1,394,194.84

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6,316.17	6,426.76	61,462.78	178.86	1,548.21	991.22	17,582,938.76

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10,737.69	7,550.44	63,831.05	178.95	1,555.10	998.03	18,977,133.60

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	84.17	1,103.28	562.29	0.01	2.09	2.06	1,391,290.44
Hearth - No Summer Emissions							
Landscape	324.22	20.40	1,805.98	0.08	4.80	4.75	2,904.40
Consumer Products	3,244.88						
Architectural Coatings	768.25						
TOTALS (lbs/day, unmitigated)	4,421.52	1,123.68	2,368.27	0.09	6.89	6.81	1,394,194.84

Area Source Changes to Defaults

Percentage of residences with wood fireplaces changed from 5% to 4.4%

Percentage of residences with natural gas fireplaces changed from 85% to 85.6%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	1,517.51	1,527.15	14,851.90	42.64	369.26	236.88	4,190,049.50
Apartments low rise	152.56	148.07	1,440.04	4.13	35.80	22.97	406,266.12
Condo/townhouse general	511.93	496.88	4,832.27	13.87	120.14	77.07	1,363,290.77
Mobile home park	4.89	4.53	44.03	0.13	1.09	0.70	12,422.89
High school	110.96	115.60	1,083.28	3.19	27.64	17.66	314,130.92
City park	3.88	2.56	23.92	0.07	0.61	0.39	6,951.64
Free-standing discount superstore	283.90	314.53	2,928.21	8.66	74.98	47.88	852,274.68
Regnl shop. center	912.76	1,007.87	9,383.09	27.76	240.25	153.43	2,731,006.49
Strip mall	179.91	198.65	1,849.42	5.47	47.35	30.24	538,285.34
General office building	515.40	531.73	5,073.39	14.82	128.21	82.05	1,456,433.19
Office park	69.48	72.01	692.64	2.01	17.43	11.16	197,944.66
Government (civic center)	214.41	233.38	2,187.08	6.45	55.80	35.66	634,212.94
General light industry	1,286.37	1,270.44	12,234.48	35.56	307.67	197.04	3,494,097.72
General heavy industry	159.46	116.43	1,131.91	3.30	28.50	18.25	323,814.48
Industrial park	392.75	386.93	3,707.12	10.80	93.48	59.84	1,061,757.42
TOTALS (lbs/day, unmitigated)	6,316.17	6,426.76	61,462.78	178.86	1,548.21	991.22	17,582,938.76

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	13,248.67	9.57	dwelling units	39,746.00	380,369.21	3,842,794.03
Apartments low rise	334.06	6.90	dwelling units	5,345.00	36,880.50	372,596.32
Condo/townhouse general	1,121.00	6.90	dwelling units	17,936.00	123,758.40	1,250,306.38

Mobile home park	37.67	4.99	dwelling units	226.00	1,127.74	11,393.33
High school		12.89	1000 sq ft	2,430.00	31,322.70	290,204.81
City park		1.59	acres	445.00	707.55	6,426.32
Free-standing discount superstore		49.21	1000 sq ft	1,785.00	87,839.85	788,186.93
Regnl shop. center		42.94	1000 sq ft	6,555.00	281,471.69	2,525,645.38
Strip mall		42.94	1000 sq ft	1,292.00	55,478.48	497,808.36
General office building		11.01	1000 sq ft	11,973.00	131,822.73	1,341,625.85
Office park		11.42	1000 sq ft	1,497.00	17,095.74	182,103.82
Government (civic center)		27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry		6.97	1000 sq ft	42,993.00	299,661.20	3,213,866.39
General heavy industry		1.50	1000 sq ft	15,523.00	23,284.50	297,692.34
Industrial park		6.96	1000 sq ft	13,484.00	93,848.64	977,410.12
					1,627,907.73	16,183,967.84

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

High school	10.0	5.0	85.0
City park	5.0	2.5	92.5
Free-standing discount superstore	2.0	1.0	97.0
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Office park	48.0	24.0	28.0
Government (civic center)	10.0	5.0	85.0
General light industry	50.0	25.0	25.0
General heavy industry	90.0	5.0	5.0
Industrial park	41.5	20.8	37.8

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\URBEMIS_PROJECTS\RnchCucamonga2030GP-2Target.urb924

Project Name: Rancho Cucamonga Proposed General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	13,070.23	1,941.20	27,013.35	75.51	4,122.74	3,968.97	2,514,635.93

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6,794.64	7,639.55	58,725.27	151.89	1,548.21	991.22	16,026,770.94

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	19,864.87	9,580.75	85,738.62	227.40	5,670.95	4,960.19	18,541,406.87

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	84.17	1,103.28	562.29	0.01	2.09	2.06	1,391,290.44
Hearth	8,972.93	837.92	26,451.06	75.50	4,120.65	3,966.91	1,123,345.49
Landscaping - No Winter Emissions							
Consumer Products	3,244.88						
Architectural Coatings	768.25						
TOTALS (lbs/day, unmitigated)	13,070.23	1,941.20	27,013.35	75.51	4,122.74	3,968.97	2,514,635.93

Area Source Changes to Defaults

Percentage of residences with wood fireplaces changed from 5% to 4.4%

Percentage of residences with natural gas fireplaces changed from 85% to 85.6%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	1,628.81	1,815.56	14,187.60	36.24	369.26	236.88	3,820,546.02
Apartments low rise	160.66	176.04	1,375.63	3.51	35.80	22.97	370,439.16
Condo/townhouse general	539.11	590.72	4,616.13	11.79	120.14	77.07	1,243,067.68
Mobile home park	5.03	5.38	42.06	0.11	1.09	0.70	11,327.37
High school	120.49	137.36	1,038.80	2.71	27.64	17.66	286,226.30
City park	3.38	3.04	22.96	0.06	0.61	0.39	6,333.72
Free-standing discount superstore	318.53	373.67	2,813.47	7.35	74.98	47.88	776,486.65
Regnl shop. center	1,022.21	1,197.37	9,015.40	23.55	240.25	153.43	2,488,153.31
Strip mall	201.48	236.00	1,776.95	4.64	47.35	30.24	490,418.62
General office building	557.87	632.14	4,839.36	12.58	128.21	82.05	1,327,429.29
Office park	75.46	85.63	659.13	1.71	17.43	11.16	180,434.48
Government (civic center)	238.42	277.32	2,097.28	5.47	55.80	35.66	577,875.07
General light industry	1,361.97	1,510.73	11,638.56	30.20	307.67	197.04	3,185,068.72
General heavy industry	146.16	138.54	1,070.11	2.80	28.50	18.25	295,189.91
Industrial park	415.06	460.05	3,531.83	9.17	93.48	59.84	967,774.64
TOTALS (lbs/day, unmitigated)	6,794.64	7,639.55	58,725.27	151.89	1,548.21	991.22	16,026,770.94

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	13,248.67	9.57	dwelling units	39,746.00	380,369.21	3,842,794.03
Apartments low rise	334.06	6.90	dwelling units	5,345.00	36,880.50	372,596.32
Condo/townhouse general	1,121.00	6.90	dwelling units	17,936.00	123,758.40	1,250,306.38

Mobile home park	37.67	4.99	dwelling units	226.00	1,127.74	11,393.33
High school		12.89	1000 sq ft	2,430.00	31,322.70	290,204.81
City park		1.59	acres	445.00	707.55	6,426.32
Free-standing discount superstore		49.21	1000 sq ft	1,785.00	87,839.85	788,186.93
Regnl shop. center		42.94	1000 sq ft	6,555.00	281,471.69	2,525,645.38
Strip mall		42.94	1000 sq ft	1,292.00	55,478.48	497,808.36
General office building		11.01	1000 sq ft	11,973.00	131,822.73	1,341,625.85
Office park		11.42	1000 sq ft	1,497.00	17,095.74	182,103.82
Government (civic center)		27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry		6.97	1000 sq ft	42,993.00	299,661.20	3,213,866.39
General heavy industry		1.50	1000 sq ft	15,523.00	23,284.50	297,692.34
Industrial park		6.96	1000 sq ft	13,484.00	93,848.64	977,410.12
					1,627,907.73	16,183,967.84

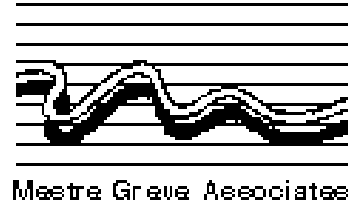
Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High school				10.0	5.0	85.0
City park				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0
Industrial park				41.5	20.8	37.8

M E M O R A N D U M



Date : February 9, 2010

To : Laura R. Stetson, Hogle-Ireland, Inc

From : Tanya Moon
Mestre Greve Associates
A Division of Landrum-Brown Inc.

**Subject: Rancho Cucamonga General Plan Update Air Quality Addendum.
Report # 500701**

Dear Laura,

The Rancho Cucamonga air quality analysis was performed in December 2009 before there was any traffic information. As a result, the air quality modeling utilized URMEMIS default assumption in trip rates and trip lengths. The product of the trip generation and trip length would result in vehicle mile travel (VMT), and thus, the project air quality emissions. The air quality analysis indicates that there would be an increase in trip generation associated with the 2030 General Plan (G.P.) Update when compared to the Existing (2001) G.P. Therefore, the G.P. Update would not be consistent with the AQMP Criterion 2 (Section 2.4.1).

A traffic study was prepared for the project subsequent to the run of the air quality model. The traffic report identifies a decrease in project traffic trip generation relative to the Existing G.P. It should be noted that the traffic study did provide data for trip rates but not total VMT. The traffic study was completed using a refined, more detailed approach to trip generation. However, the number of trips is only a part of the equation. The traffic report shows lower trip rates, and thus implies lower air quality emissions for the project. In this case, because the project traffic volumes fall below the volumes and assumptions inherent in the 2003 AQMP, and based on the trip generation data in the traffic study, the project would likely be consistent with the AQMP Criterion 2.

If you have any questions, please do not hesitate to email or call.

Appendix C

Plant and Animal Compendiums

Select	Species
x	GYMNOSPERMS
x	<i>PINACEAE</i> - PINE FAMILY
x	<i>Pinus</i> sp. pine
x	FLOWERING PLANTS
x	CLASS DICOTYLEDONES (DICOTS)
x	<i>AIZOACEAE</i> - FIG-MARIGOLD FAMILY
x	<i>Carpobrotus edulis</i> * hottentot fig
x	<i>ANACARDIACEAE</i> - SUMAC FAMILY
x	<i>Malosma laurina</i> laurel sumac
x	<i>Schinus molle</i> * Peruvian pepper tree
x	<i>ASTERACEAE (COMPOSITAE)</i> - SUNFLOWER FAMILY
x	<i>Ambrosia psilostachya</i> western ragweed
x	<i>Artemisia californica</i> California sagebrush
x	<i>Baccharis salicifolia</i> mule fat
x	<i>Centaurea melitensis</i> * tocalote
x	<i>Encelia farinosa</i> brittlebush
x	<i>Gnaphalium bicolor</i> bicolored everlasting/Bioletti's cudweed
x	<i>Gutierrezia sarothrae</i> San Joaquin matchweed
x	<i>Helianthus annuus</i> western sunflower
x	<i>Heterotheca grandiflora</i> telegraph weed
x	<i>Lepidospartum squamatum</i> scale-broom
x	<i>Lessingia filaginifolia</i> California aster
x	<i>Xanthium strumarium</i> cocklebur
x	<i>BETULACEAE</i> - BIRCH FAMILY
x	<i>Alnus rhombifolia</i> white alder
x	<i>BRASSICACEAE (CRUCIFERAE)</i> - MUSTARD FAMILY
x	<i>Brassica nigra</i> * black mustard
x	<i>CACTACEAE</i> - CACTUS FAMILY
x	<i>Opuntia</i> sp. beavertail
x	<i>CHENOPODIACEAE</i> - GOOSEFOOT FAMILY
x	<i>Salsola tragus</i> * Russian thistle
x	<i>CUCURBITACEAE</i> - GOURD FAMILY
x	<i>Cucurbita foetidissima</i> coyote melon/calabazilla
x	<i>CUSCUTACEAE</i> - DODDER FAMILY
x	<i>Cuscuta californica</i> California dodder
x	<i>FABACEAE (LEGUMINOSAE)</i> - LEGUME FAMILY
x	<i>Acacia</i> sp.* wattle
x	<i>Lotus scoparius</i> deerweed/California broom
x	<i>FAGACEAE</i> - OAK/BEECH FAMILY

x	<i>Quercus agrifolia</i> coast live oak
x	GERANIACEAE - GERANIUM FAMILY
x	<i>Erodium cicutarium</i> * red-stemmed filaree
x	HYDROPHYLLACEAE - WATERLEAF FAMILY
x	<i>Eriodictyon crassifolium</i> thick-leaf yerba santa
x	JUGLANDACEAE - WALNUT FAMILY
x	<i>Juglans californica</i> southern California black walnut
x	LAMIACEAE (LABIATAE) - MINT FAMILY
x	<i>Marrubium vulgare</i> * common horehound
x	<i>Salvia apiana</i> white sage
x	<i>Salvia mellifera</i> black sage
x	MYRTACEAE - MYRTLE FAMILY
x	<i>Eucalyptus sp.*</i> gum
x	PLATANACEAE - SYCAMORE FAMILY
x	<i>Platanus racemosa</i> western sycamore
x	POLYGONACEAE - BUCKWHEAT FAMILY
x	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> California buckwheat
x	ROSACEAE - ROSE FAMILY
x	<i>Adenostoma fasciculatum</i> chamise
x	<i>Cercocarpus betuloides</i> mountain mahogany
x	<i>Heteromeles arbutifolia</i> toyon/christmas berry
x	<i>Prunus ilicifolia</i> holly-leaved cherry
x	<i>Prunus sp.*</i> flowering plum
x	SALICACEAE - WILLOW FAMILY
x	<i>Salix laevigata</i> red willow
x	SOLANACEAE - NIGHTSHADE FAMILY
x	<i>Nicotiana glauca</i> * tree tobacco
x	<i>Solanum sp.</i> nightshade
x	VITACEAE - GRAPE FAMILY
x	<i>Vitis sp.*</i> grape
x	CLASS MONOCOTYLEDONES (MONOCOTS)
x	ARECACEAE (PALMAE) - PALM FAMILY
x	<i>Washingtonia sp.</i> fan palm
x	JUNCACEAE - RUSH FAMILY
x	<i>Juncus sp.</i> rush
x	LILIACEAE - LILY FAMILY
x	<i>Yucca whipplei</i> Our Lord's candle
x	POACEAE [GRAMINEAE] - GRASS FAMILY
x	<i>Bromus spp.*</i> brome
x	<i>Muhlenbergia rigens</i> deergrass

x	<i>Nassella</i> sp. needlegrass
x	<i>Pennisetum setaceum</i> * African fountain grass
x	TYPHACEAE - CATTAIL FAMILY
x	<i>Typha</i> sp. cattail
x	* <i>introduced species</i>

FAUNA COMPENDIUM

WILDLIFE COMPENDIUM
Amphibians
HYLIDAE - TREEFROGS
<i>Pseudacris [Hyla] regilla</i> Pacific treefrog
Reptiles
PHRYNOSOMATIDAE - ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS
<i>Sceloporus occidentalis</i> western fence lizard
<i>Uta stansburiana</i> side-blotched lizard
Birds
ANATIDAE - WATERFOWL
<i>Anas americana</i> American wigeon
<i>Anas platyrhynchos</i> mallard
ODONTOPHORIDAE - QUAILS
<i>Callipepla californica</i> California quail
ACCIPITRIDAE - HAWKS
<i>Circus cyaneus</i> northern harrier
<i>Accipiter cooperii</i> Cooper's hawk
<i>Buteo jamaicensis</i> red-tailed hawk
FALCONIDAE - FALCONS
<i>Falco sparverius</i> American kestrel
SCOLOPACIDAE - SANDPIPERS & PHALAROPES
<i>Tringa [Catoptrophorus] semipalmata</i> willet
COLUMBIDAE - PIGEONS & DOVES
<i>Columba livia</i> * rock pigeon
<i>Zenaidura macroura</i> mourning dove
TROCHILIDAE - HUMMINGBIRDS
<i>Calypte anna</i> Anna's hummingbird
<i>Calypte costae</i> Costa's hummingbird
PICIDAE - WOODPECKERS
<i>Melanerpes formicivorus</i> acorn woodpecker

FAUNA COMPENDIUM

<i>Picoides nuttallii</i> Nuttall's woodpecker
<i>Colaptes auratus</i> northern flicker
TYRANNIDAE - TYRANT FLYCATCHERS
<i>Empidonax difficilis</i> Pacific-slope flycatcher
<i>Sayornis nigricans</i> black phoebe
<i>Sayornis saya</i> Say's phoebe
<i>Tyrannus vociferans</i> Cassin's kingbird
LANIIDAE - SHRIKES
<i>Lanius ludovicianus</i> loggerhead shrike
CORVIDAE - JAYS & CROWS
<i>Aphelocoma californica</i> western scrub-jay
<i>Corvus brachyrhynchos</i> American crow
<i>Corvus corax</i> common raven
PARIDAE - TITMICE
<i>Baeolophus inornatus</i> oak titmouse
AEGITHALIDAE - BUSHTITS
<i>Psaltriparus minimus</i> bushtit
SITTIDAE - NUTHATCHES
<i>Sitta carolinensis</i> white-breasted nuthatch
TROGLODYTIDAE - WRENS
<i>Salpinctes obsoletus</i> rock wren
<i>Thryomanes bewickii</i> Bewick's wren
<i>Troglodytes aedon</i> house wren
REGULIDAE - KINGLETS
<i>Regulus calendula</i> ruby-crowned kinglet
SYLVIIDAE - GNATCATCHERS
<i>Polioptila caerulea</i> blue-gray gnatcatcher
TURDIDAE - THRUSHES & ROBINS
<i>Sialia mexicana</i> western bluebird
<i>Turdus migratorius</i> American robin
TIMALIIDAE - WRENTITS

FAUNA COMPENDIUM

<i>Chamaea fasciata</i> wrenit
MIMIDAE - THRASHERS
<i>Mimus polyglottos</i> northern mockingbird
STURNIDAE - STARLINGS
<i>Sturnus vulgaris</i> * European starling
MOTACILLIDAE - PIPITS
<i>Anthus rubescens</i> American pipit
PARULIDAE - WARBLERS
<i>Dendroica coronata</i> yellow-rumped warbler
EMBERIZIDAE - SPARROWS & JUNCOS
<i>Pipilo maculatus</i> spotted towhee
<i>Pipilo crissalis</i> California towhee
<i>Aimophila ruficeps</i> rufous-crowned sparrow
<i>Melospiza melodia</i> song sparrow
<i>Zonotrichia leucophrys</i> white-crowned sparrow
<i>Junco hyemalis</i> dark-eyed junco
ICTERIDAE - BLACKBIRDS
<i>Sturnella neglecta</i> western meadowlark
<i>Euphagus cyanocephalus</i> Brewer's blackbird
FRINGILLIDAE - FINCHES
<i>Carpodacus mexicanus</i> house finch
<i>Carduelis psaltria</i> lesser goldfinch
PASSERIDAE - OLD WORLD SPARROWS
<i>Passer domesticus</i> house sparrow *
Mammals
DIDELPHIDAE - NEW WORLD OPOSSUMS
<i>Didelphis virginiana</i> * Virginia opossum
LEPORIDAE - HARES & RABBITS
<i>Sylvilagus audubonii</i> desert cottontail
SCIURIDAE - SQUIRRELS

FAUNA COMPENDIUM

<i>Spermophilus beecheyi</i> California ground squirrel
GEOMYIDAE - POCKET GOPHERS
<i>Thomomys bottae</i> Botta's pocket gopher
CANIDAE - WOLVES & FOXES
<i>Canis latrans</i> coyote
PROCYONIDAE - RACCOONS
<i>Procyon lotor</i> common raccoon
CERVIDAE - DEER
<i>Odocoileus hemionus</i> mule deer
* introduced species

Appendix D
Greenhouse Gas Assessment and
Emissions Calculations

**Greenhouse Gas Assessment For The
Rancho Cucamonga
General Plan Update**
CITY OF RANCHO CUCAMONGA

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Table Of Contents

1.0 Background Information.....	1
1.1 <i>Project Description</i>	1
1.2 <i>Greenhouse Gases and Climate Change</i>	1
1.3 <i>Emission Inventories</i>	6
1.4 <i>Sources of Greenhouse Gases in California</i>	9
2.0 Regulatory Framework.....	12
3.0 Significance Thresholds.....	17
4.0 Short term Construction Emissions	20
5.0 Estimate of Project Greenhouse Gas Emissions	20
6.0 Recommended Conditions of Approval	24

1.0 Background Information

1.1 Project Description

The City General Plan (GP) Update encompasses a total of approximately 14,016 acres. The GP Update Target Density will be analyzed since it has the most probable level of development. The Target Density consists of a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

The City's proposed General Plan Update identifies 21 land use designations which are divided into nine categories, including residential, commercial, mixed-use, industrial, public facilities, schools, parks, open space and conservations, and vacant lands. The GP Update will be compared with the existing conditions and Existing GP.

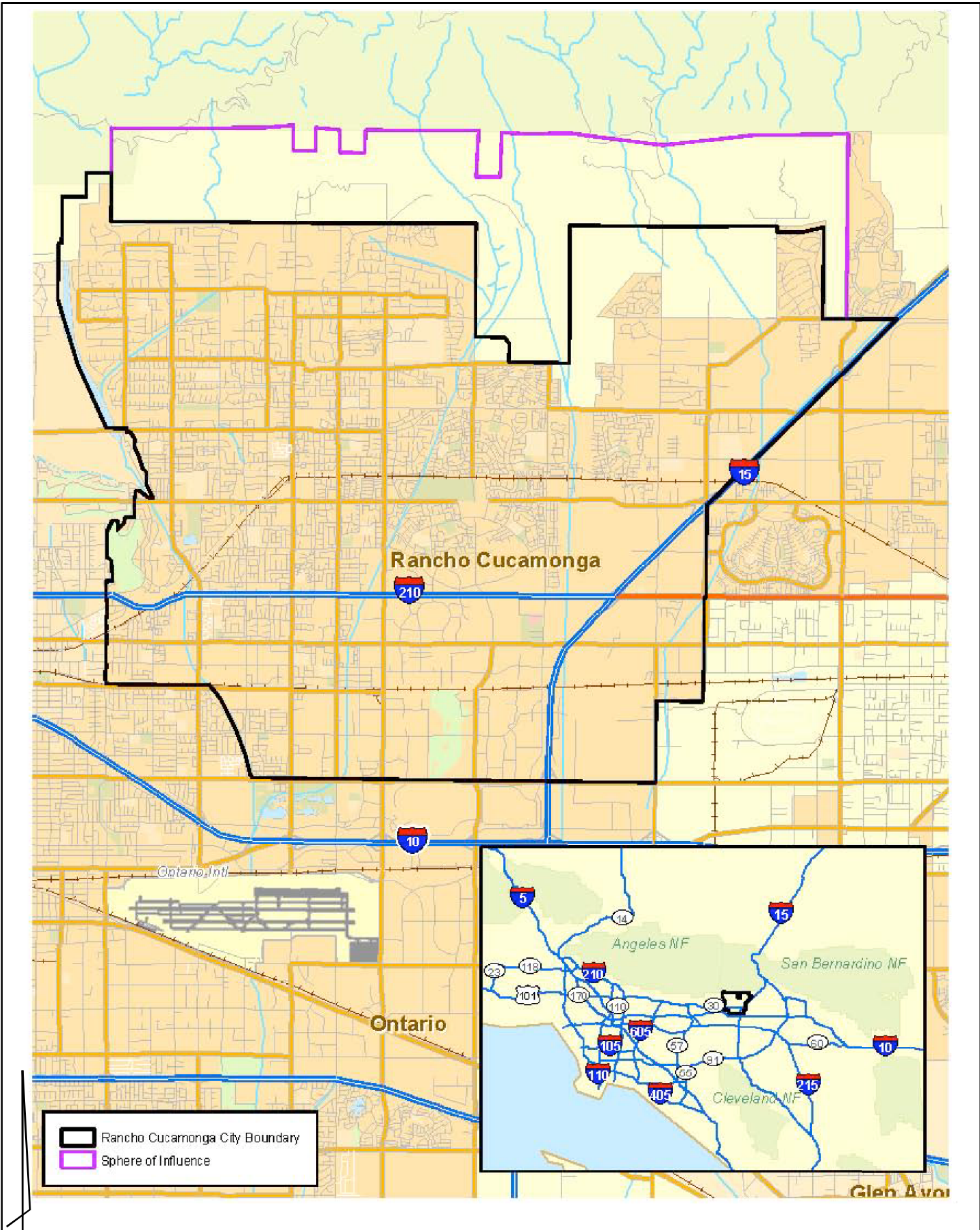
The City of Rancho Cucamonga is located in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south and east, including the cities of Upland, Ontario and Fontana and a large area of unincorporated San Bernardino County to the east. The northernmost portion of the City's Sphere-of-influence is adjacent to the San Bernardino National Forest. The vicinity map is presented in Exhibit 1. The land use plan is illustrated in Exhibit 2.

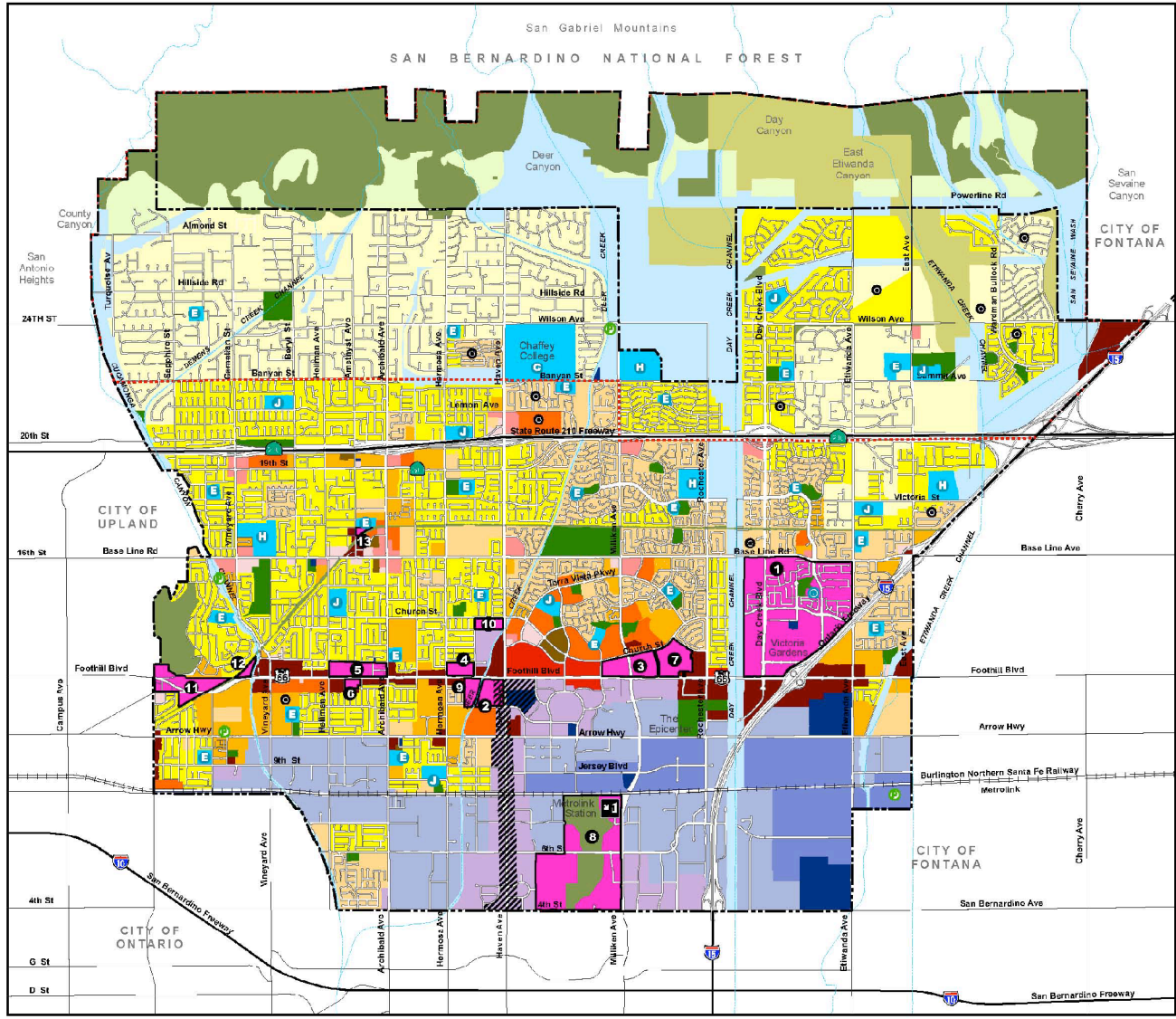
1.2 Greenhouse Gases and Climate Change

1.2.1 *Impact of Climate Change*

The Earth's climate has always been in the process of changing, due to many different natural factors. These factors have included changes in the Earth's orbit, volcanic eruptions, and varying amounts of energy released from the sun. Differences such as these have caused fluctuations in the temperature of the climate, ranging from ice ages to long periods of warmth. However, since the late 18th century, humans have had an increasing impact of the rate of climate change, beginning with the Industrial Revolution.

Many human activities have augmented the amount of "greenhouse gases" ("GHGs") being released into our atmosphere, specifically the burning of fossil fuels, such as coal and oil, and deforestation. The gases increase the efficiency of the greenhouse effect, which is the process of trapping and recycling energy (in the form of heat) that the Earth emits naturally, resulting in higher temperatures worldwide. The Intergovernmental Panel on Climate Change stated in February 2007 that warming is unequivocal, expressing very high confidence (expressed as a nine out of ten chance of being correct) that the net effect of human activities since 1750 has been one of warming. According to the National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) data, the average surface temperature of the Earth has increased by about 1.2 to 1.4 °F since 1900. The warmest global average temperatures in human record have all occurred within the past 15 years, with the warmest two years being 1998 and 2005. [EPA, 2007, epa.gov/climatechange/basicinfo.html].





Draft General Plan (2009)

Residential

- Very Low (Less than 2 du/ac)
- Low (2 to 4 du/ac)
- Low Medium (4 to 8 du/ac)
- Medium (8 to 14 du/ac)
- Medium High (14 to 24 du/ac)
- High (24 to 30 du/ac)

Commercial

- Office (Max. 1.00 FAR)
- Neighborhood Commercial (Max 0.35 FAR)
- Community Commercial (Max. 0.35 FAR)
- General Commercial (Max. 0.35 FAR)

Mixed Use

- Mixed Use (Max. 1.00 FAR)

Industrial

- Industrial Park (Max. 0.60 FAR)
- General Industrial (Max. 0.60 FAR)
- Heavy Industrial (Max. 0.50 FAR)

Open Space

- Hillside Residential (0.1 to 2 du/ac)
- Conservation
- Open Space (0 to 0.1 du/ac)
- Flood Control/Utility Corridor

Public Facility

- Civic/Regional (Max. 1.0 FAR)
- Schools (Max. 0.20 FAR)
- Parks

Schools and Parks

- Elementary School
- Junior High School
- High School
- College
- Proposed Elementary School
- Proposed Park

Overlays

- Haven Avenue Office Overlay
- Equestrian/Rural Area Overlay
- Master Plan Overlay

Mixed Use Areas

- Victoria Gardens
- Town Center at Haven and Foothill
- Terra Vista
- Foothill at Hemosa and Center
- Foothill at Archibald and Helman
- Foothill at Helms and Hampshire
- Foothill at Church and Mayten
- Empire Lakes
- Foothill at Deer Creek Channel
- Haven and Church
- Bear Gulch
- Foothill at Cucamonga Channel
- Alta Loma

Notes: 1. Location of proposed parks and schools are not fixed, and may be adjusted to accommodate future planning needs.

Source: Rancho Cucamonga and San Bernardino County Assessor, 2009.

Scale: 0 0.25 0.5 1 1.5 2 Miles

August 19, 2009

Figure LU-X:
Draft Land Use Plan
 RANCHO CUCAMONGA GENERAL PLAN

This process of heating is often referred to as “global warming,” although the National Academy of Sciences prefers the terms “climate change” as an umbrella phrase which includes global warming as well as other environmental changes. Some of these effects include changes to rainfall, wind, and current weather patterns, as well as snow and ice cover, and sea level.

Depending on which GHG emissions scenario is used, climate models predict that the Earth’s average temperature could rise anywhere between 2.5 to 10.4 °F from 1990 to the end of this century. The degree of change is influenced by the assumed amount of GHG emissions, and how quickly atmospheric GHG levels are stabilized. At this point, however, the climate change models are not capable of predicting local impacts, but rather, can only predict global trends. [EPA, 2007, epa.gov/climatechange/basicinfo.html].

Global GHG emissions are measured in million metric tons of carbon dioxide equivalent (“MMT CO₂EQ”) units. A metric ton is approximately 2,205 pounds. Some GHGs emitted into the atmosphere are naturally occurring, while others are caused solely by human activities. The principal GHGs that enter the atmosphere because of human activities are:

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), agriculture, irrigation, and deforestation, as well as the manufacturing of cement.
- **Methane (CH₄)** is emitted through the production and transportation of coal, natural gas, and oil, as well as from livestock. Other agricultural activities influence methane emissions as well as the decay of waste in landfills.
- **Nitrous oxide (N₂O)** is released most often during the burning of fuel at high temperatures. This greenhouse gas is caused mostly by motor vehicles, which also include non-road vehicles, such as those used for agriculture.
- **Fluorinated Gases** are emitted primarily from industrial sources, which often include hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Though they are often released in smaller quantities, they are referred to as High Global Warming Potential Gases because of their ability to cause global warming. Fluorinated gases are often used as substitutes for ozone depleting substances.

These gases have different potentials for trapping heat in the atmosphere, called global warming potential (“GWP”). For example, one pound of methane has 21 times more heat capturing potential than one pound of carbon dioxide. When dealing with an array of emissions, the gases are converted to carbon dioxide equivalents for comparison purposes. The GWPs for common greenhouse gases are shown in Table 1.

Table 1
Global Warming Potentials (GWP)

Gas	Global Warming Potential
Carbon Dioxide	1
Methane	21
Nitrous Oxide	310
HFC-23	11,700
HFC-134a	1,300
HFC-152a	140
PFC: Tetrafluoromethane (CF ₄)	6,500
PFC: Hexafluoroethane (C ₂ F ₆)	9,200
Sulfur Hexafluoride (SF ₆)	23,900

Source: EPA 2006. Non CO₂ Gases Economic Analysis and inventory. (<http://www.epa.gov/nonco2/econ-inv/table.html>), December 2006

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 40.7% of total GHG emissions in the state (California Energy Commission 2006a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (22.2%) and the industrial sector (20.5%) (California Energy Commission 2006a). A byproduct of fossil fuel combustion is CO₂. Processes that absorb and accumulate CO₂, often called CO₂ "sinks," include absorption by vegetation and dissolution into the ocean. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and municipal solid waste landfills.

1.2.2 Impact of Climate Change on California and Human Health

The long term environmental impacts of global warming may include sea level rise that could cause devastating erosion and flooding of coastal cities and villages, as well as more intense hurricanes and typhoons worldwide. In the United States, Chicago is projected to experience 25% more frequent heat waves and Los Angeles a four-to-eight-fold increase in heat wave days by the end of the century (IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge).

Locally, global warming could cause changing weather patterns with increased storm and drought severity in California. Changes to local and regional ecosystems including the potential loss of species, and a significant reduction in winter snow pack (e.g., estimates include a 30 to 90% reduction in snow pack in the Sierra Nevada mountain range). Current data suggest that in the next 25 years, in every season of the year, California could experience unprecedented heat, longer and more extreme heat waves, greater intensity and frequency of heat waves, and longer dry periods. The California Climate Change Center (2006) predicted that California could witness the following events:

- Temperature increases between 3 and 10.5 degree Fahrenheit
- 6 to 20 inches or more increase in sea level

- 2 to 4 times as many heat wave days in major urban centers
- 2 to 6 times as many heat-related deaths in major urban centers
- 1 to 1.5 times more critically dry years
- 10 to 55% increase in the risk of wildfires

An increase in the frequency of extreme events may result in more event-related deaths, injuries, infectious diseases, and stress-related disorders. Particular segments of the population such as people with heart problems, asthma, the elderly, the very young and the homeless can be especially vulnerable to extreme heat. Also, climate change may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects. These "vector-borne" diseases include malaria, dengue fever, yellow fever, and encephalitis. Also, algal blooms could occur more frequently as temperatures warm — particularly in areas with polluted waters — in which case diseases (such as cholera) that tend to accompany algal blooms could become more frequent.

1.2.3 Adaptation Impact

Adaptation refers to potential climate change impacts on the project. Global warming is already having a profound impact on water resources. Climate change has already altered the weather patterns and water supply in California, leading to increased water shortages (i.e., a dwindling snowpack, bigger flood flows, rising sea levels, longer and harsher droughts). Water supplies are also at risk from rising sea levels. Risks may include degrade California's estuaries, wetlands, and groundwater aquifers, which would threaten the quality and reliability of the major California fresh water supply (Climate Change Adaptation Strategies for California's Water, State of California Department of Water Resources, October 2008).

Higher temperatures will also likely increase electricity demand due to higher air conditioning use. Even if the population remained unchanged, toward the end of the century annual electricity demand could increase by as much as 20% if temperatures rise into the higher warming range. (Implementing aggressive efficiency measures could lower this estimate.)

Higher temperatures may lead to increased electricity use for cooling. Additionally, more water may be needed for the landscaping. However, sea level rise is not a concern in Rancho Cucamonga given its distance from the ocean.

Adaptation includes the responses to the changing climate and policies to minimize the predicted impacts (e.g., building better coastal defenses to sea level rise). Adaptation is not included in this report. It should be noted that adaptation addresses the cause and effects of climate change; it is not mitigation. Mitigation includes intervention or policies to reduce GHG emissions or to enhance the sinks of GHGs.

1.3 Emission Inventories

To put perspective on the emissions generated by a project and to better understand the sources of GHGs, it is important to look at emission inventories. The United Nations has taken the lead in quantifying GHG emissions and compiling the literature on climate change. The United

Nations' estimate for CO₂ equivalents for the world and for the top ten CO₂ producing countries is presented in Table 2.

Table 2
Top Ten CO₂ Producing Nations Between 1990-2004
(Emissions in Million Metric Tons CO₂EQ)

Country	Emissions	Percent of Global
1. United States	7017.32	21.06%
2. China	4057.31	12.17%
3. Japan	1340.08	4.02%
4. India	1214.25	3.64%
5. Germany	1004.79	3.02%
6. Canada	720.63	2.16%
7. Brazil	658.98	1.98%
8. United Kingdom	655.79	1.97%
9. Italy	567.92	1.70%
10. France	546.53	1.64%
Total Global	33,326	
California	480	1.44%

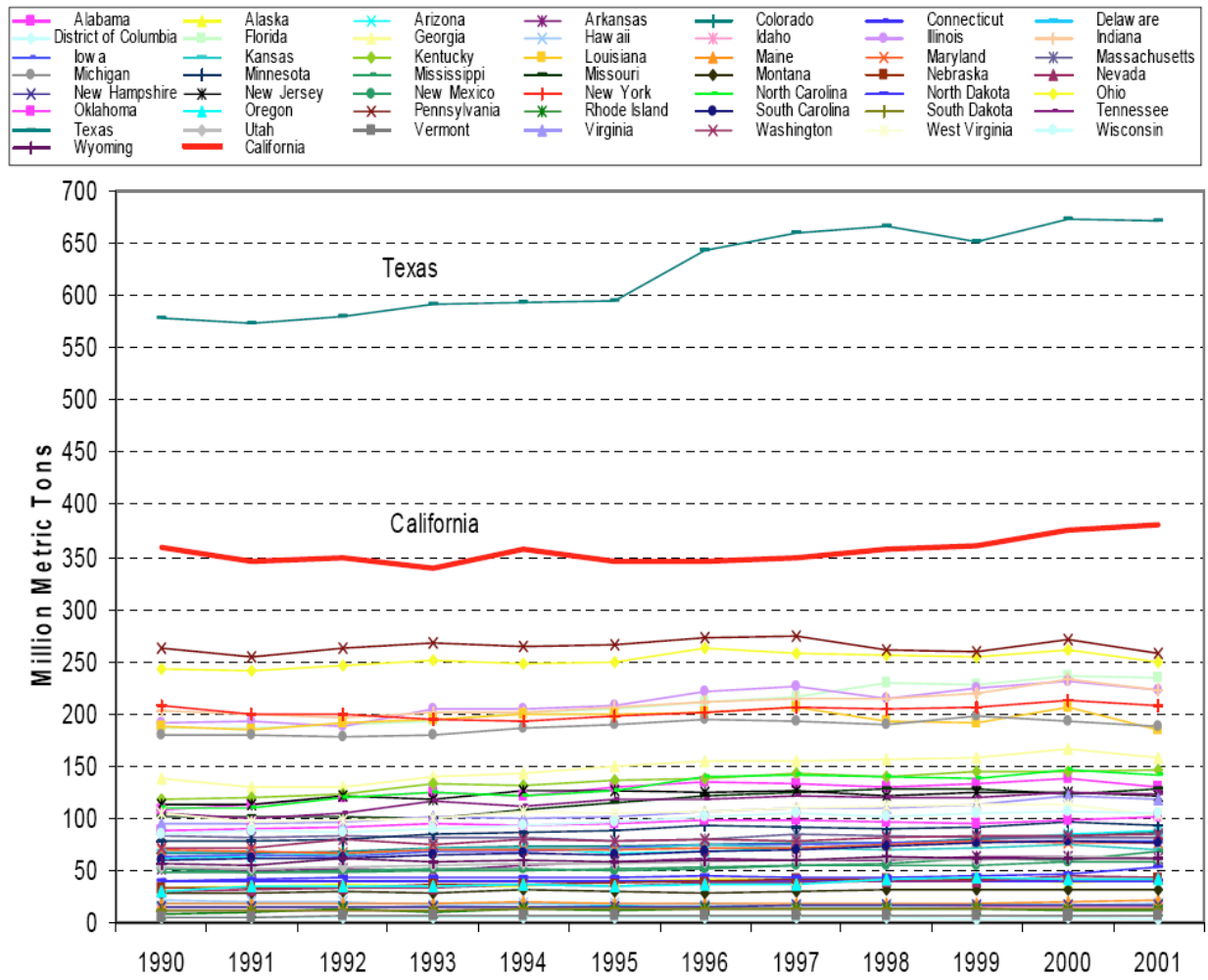
Source: United Nations Framework Convention on Climate Change, "National Greenhouse Gas Inventory Data for the Period 1990–2006 and Status of Reporting," October 19, 2006.

Global CO₂ emissions totaled about 33,326 MMT CO₂EQ in 2006. The United States released 7,017 MMT CO₂EQ in 2006, which is approximately 21% of global total emissions.

Within the United States, California has the second highest level of GHG production, with Texas having the highest. In 2001, the burning of fossil fuels produced over 81% of total GHG emissions. In relation to other states, California is the second highest producer of CO₂ by fossil fuels, as shown in Exhibit 3.

Exhibit 3

CO₂ Production through Fossil Fuels by State



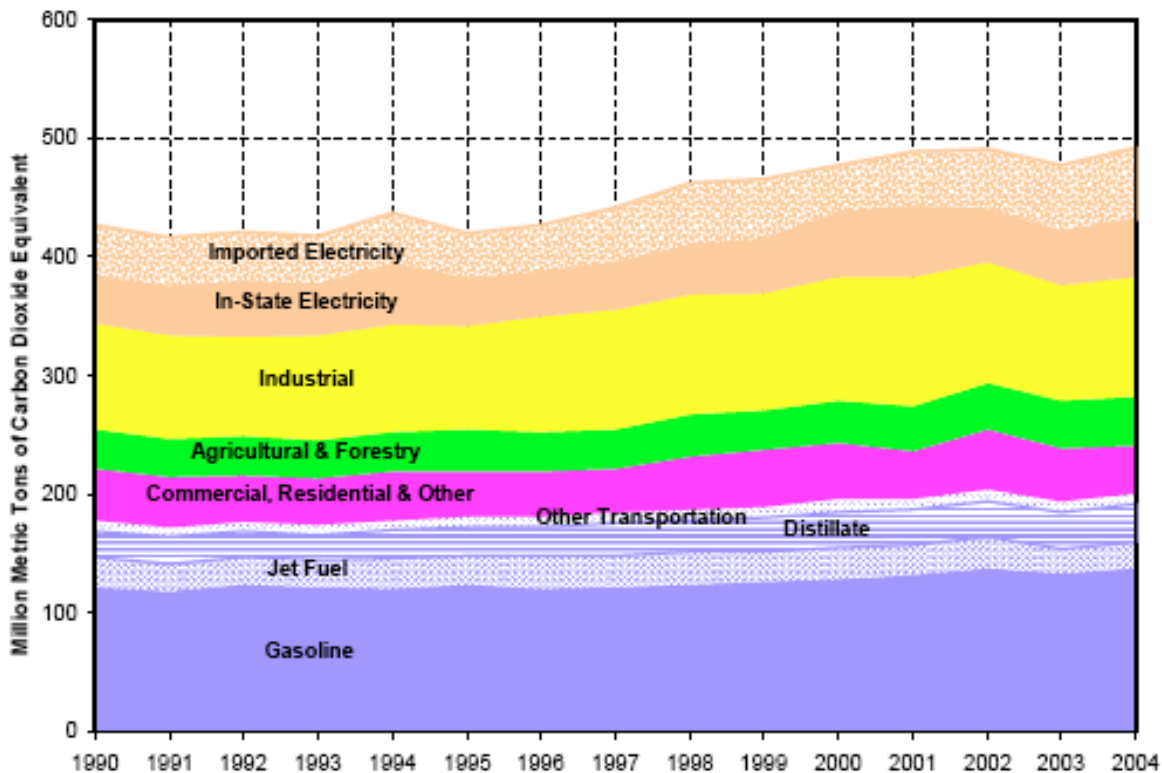
Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004," December 2006.

1.4 Sources of Greenhouse Gases in California

The California Energy Commission (“CEC”) categorizes GHG generation by source into five broad categories:

- **Transportation** includes the combustion of gasoline and diesel in automobiles and trucks. Transportation also includes jet fuel consumption and bunker fuel for ships.
- **Agriculture and forestry** GHG emissions are composed mostly of nitrous oxide from agricultural soil management, CO₂ from forestry practice changes, methane from enteric fermentation that takes place in the digestive systems of animals, and methane and nitrous oxide from manure management.
- **Commercial and residential** uses generate GHG emissions primarily from the combustion of natural gas for space and water heating.
- **Industrial** GHG emissions are produced from many industrial activities. Major contributors include oil and natural gas extraction; crude oil refining; food processing; stone, clay, glass, and cement manufacturing; chemical manufacturing; and cement production. Wastewater treatment plants are also significant contributors to this category.
- **Electricity generation** includes both emissions from power plants in California as well as power plants located outside of the state that supply electricity to the state.

The amount of GHGs released from each of these categories in California from 1990 to 2004 is shown in Exhibit 4.

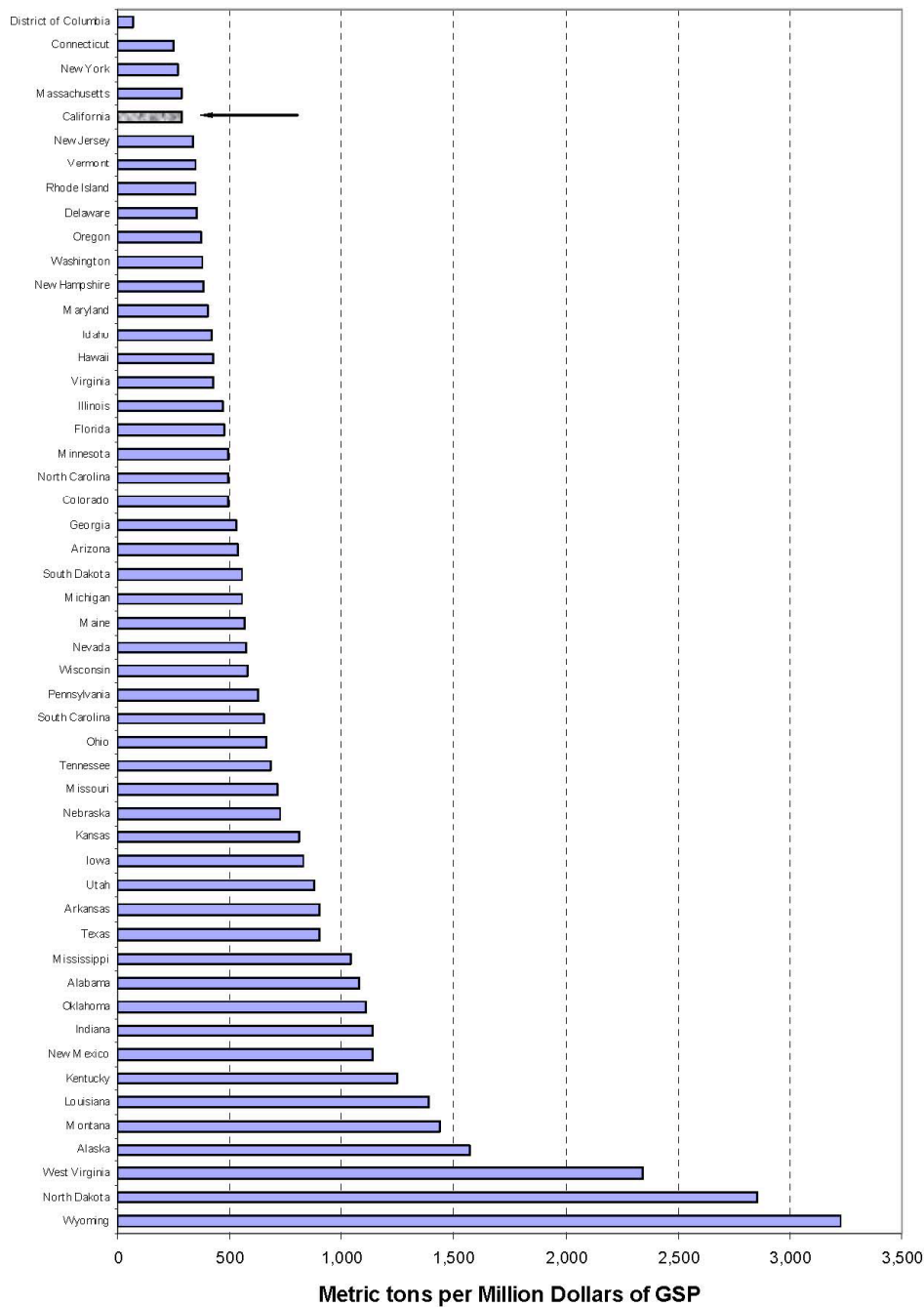
Exhibit 4**CA Greenhouse Emissions by Sector (In MMT CO₂EQ)**

Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004," December 2006.

Examination of Exhibit 4 indicates that most of the GHGs in California are emitted by transportation sources, such as automobiles, trucks, and airplanes. (The transportation sector is labeled as gasoline, jet fuel, distillate, and other transportation in Exhibit 4.) The transportation sector contributed approximately 40% of the California GHG between 1990 and 2004. The electric generation and industrial sectors are the second largest GHG contributors in the state, accounting for 18 to 20%, per sector. The smallest GHG contributors are the commercial and residential sector, as well as the agricultural and forestry sector, account for about 10% and 8%, respectively.

While California has the second highest rate of GHG production in the nation, it should also be noted that California has one of the lowest per capita rates of GHG emissions, as shown in Exhibit 5. According to Exhibit 5, California had the fourth lowest per capita rate of CO₂ production from fossil fuels in the United State in 2001. Wyoming produced the most CO₂ per capita, while the District of Columbia produced least.

Exhibit 5
CO₂ Emissions From Fossil Fuels Per Capita (2001)



Source: California Energy Commission, "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004," December 2006.

2.0 Regulatory Framework

Federal Plans, Policies, Regulations, and Laws. The federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the U.S. Environmental Protection Agency (EPA) to propose a “coordinated national policy on global climate change,” and ordered the Secretary of State to work “through the channels of multilateral diplomacy” to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs.

More recently, in *Massachusetts v. EPA* (April 2, 2007), the United States Supreme Court held that GHGs fall within the Clean Air Act’s definition of an “air pollutant,” and directed the EPA to consider whether GHGs are causing climate change. If so, the EPA must regulate GHG emissions from automobiles under the Clean Air Act.

On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act. The rule declared that GHGs endanger human health and is the first step to regulation through the federal Clean Air Act. The EPA defines air pollution to include the six key GHGs – CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA’s proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation’s National Highway Safety Administration on September 15, 2009 (<http://www.epa.gov/climatechange/endangerment.html>.)

In addition, Congress has increased the corporate average fuel economy (CAFE) of the U.S. automotive fleet. In December 2007, President Bush signed a bill raising the minimum average miles per gallon for cars, sport utility vehicles, and light trucks to 35 miles per gallon by 2020. This increase in CAFE standard will create a substantial reduction in GHG emissions from automobiles, which is the largest single emitting GHG sector in California.

California State Plans, Policies, Regulations, and Laws. In the past year, California has distinguished itself as a national leader in efforts to address global climate change by enacting several major pieces of legislation, engaging in multi-national and multi-state collaborative efforts, and preparing a wealth of information on the impacts associated with global climate change.

In November 2008, the Governor issued Executive Order S-13-08 directing state agencies to plan for sea level rise and other climate change impacts. There are four key actions in the Executive Order: (1) initiation of a climate change adaptation strategy that will assess the state’s expected climate change impacts where the state is most vulnerable, with recommendations by early 2009; (2) an expert panel on sea level rise will inform state planning and development efforts; (3)

interim guidance to state agencies on planning for sea level rise in coastal and floodplain areas for new projects; and (4) initiation of a report on critical existing and planned infrastructure projects vulnerable to sea level rise. (<http://gov.ca.gov/executive-order/11036/>)

Pursuant to AB 32, the California Air Resources Board (“CARB”) has adopted a number of relevant policies and directives. In December 2008, the Scoping Plan was adopted. The Plan is a central requirement of the statute. In addition, it has adopted a number of protocols for industry and government sectors, including one for local government (<http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm>). (See also, the Local Government Toolkit (<http://www.coolcalifornia.org/local-government>.)

In response to SB 97, the Office of Planning and Research (“OPR”) issued a Technical Advisory on CEQA and Climate Change in June 2008. The Advisory provides an outline of what should be included in a GHG analysis under CEQA (<http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>). In January 2009, OPR issued draft amendments to the CEQA Guidelines that address GHGs. Among the amendments are the following:

- Determining the Significance of Impacts from Greenhouse Gas Emissions (Guidelines § 15064.4);
- Thresholds of Significance (Guidelines □ 15064.7(c));
- Discussion of Cumulative Impacts (Guidelines □ 15130(a)(1)(B) and Guidelines § 15130(f)); and
- Tiering and Streamlining the Analysis of Greenhouse Gas Emissions (Guidelines § 15183.5).

Assembly Bill 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. In general, AB 32 directs CARB to do the following:

- On or before June 30, 2007, CARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;
- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on CARB’s calculation of statewide GHG emissions in 1990 (an approximately 25% reduction in existing statewide GHG emissions);
- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that “contribute the most to statewide emissions” (Health & Safety Code § 38530);
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;

- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020;
- On January 1, 2012, CARB's GHG emissions regulations become operative; and
- On January 1, 2020, achieve 1990 levels of GHG emissions.

In a December 2006 report, CARB estimated that California emitted between 425 and 468 million metric tons of CO₂ in 1990. In December 2007, CARB finalized 1990 emissions at 427 million metric tons of CO₂. In the August 2007 draft report, CARB estimated California emitted approximately 480 million metric tons of CO₂ in 2004. More recent data from the U.S. Census Bureau California indicates that the total emission is about 13 metric tons of CO₂ per capita, based on 2007 population of 36,553,215.

AB 32 takes into account the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring CARB to recommend a *de minimis* (minimal importance) threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire state to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

CARB "Early Action Measures" (June 30, 2007). On June 21, 2007, CARB approved its early action measures to address climate change, as required by AB 32. The three measures include: (1) a low carbon fuel standard, which will reduce the carbon-intensity in California fuels, thereby reducing total CO₂ emissions; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH₄ (methane) capture from landfills through the required implementation of state-of-the-art capture technologies.

CARB Mandatory Reporting Regulations (December 2008). Under AB 32, CARB propounded regulations to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO₂ from stationary source combustion.

Senate Bill 97 (2007). By July 1, 2009, the Governor's Office of Planning and Research (OPR) is directed to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by the California Environmental Quality Act. The Resources Agency is required to certify and

adopt these guidelines by January 1, 2010. OPR is required to periodically update these guidelines as CARB implements AB 32. In addition, SB 97 states that the failure to include a discussion of greenhouse gas emissions in any CEQA document for a project funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 shall not be a cause of action under CEQA. This last provision will be repealed on January 1, 2010.

Executive Order S-01-07 (2007). Executive Order S-01-07 calls for a reduction in the carbon intensity of California's transportation fuels by at least 10% by 2020. As noted above, the low-carbon fuel standard ("LCFS") was adopted by CARB as one of its three "early action measures" on June 21, 2007.

Senate Bill 1368 (2006) (Public Utilities Code §§ 8340-41). SB 1368 required the California Public Utilities Commission ("PUC") to establish a "GHG emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the state's three largest privately-owned utilities. (Pub. Res. Code § 8341(d)(1).) These utilities provide approximately 30% of the state's electric power. After the PUC acted, the CEC adopted a performance standard "consistent with" the PUC performance standard and applied it to local publicly owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007 deadline). (Cal. Pub. Res. Code § 8341(e)(1).) However, the California Office of Administrative Law ("OAL") found four alleged flaws in the CEC's rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.

Senate Bill 107 (2006). SB 107 requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric, to generate 20% of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017.

Senate Bill 375 (September 2008). In September 2008, SB 375 was signed by Governor Schwarzenegger. SB 375 is a comprehensive global warming bill that helps to achieve the goals of AB 32. To help establish these targets, the CARB assigned a Regional Targets Advisory Committee to recommend factors to be considered and methodologies for setting greenhouse gas emission reduction targets. SB 375 also provides incentive: relief from certain CEQA requirements for development projects that are consistent with regional plans that achieve the targets. SB 375 requires CARB to develop, in collaboration with Metropolitan Planning Organizations (MPOs), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. The MPOs are required to include and adopt, in their regional transportation plan, a sustainable community strategy that will meet the region's target provided by CARB.

Western Regional Climate Action Initiative (Arizona, California, New Mexico, Oregon, Utah, Washington)(2007). Acknowledging that the western states already experience a hotter, drier climate, the Governors of the foregoing states have committed to three time-sensitive actions: (1) by August 26, 2007, to set a regional goal to reduce emissions from the states collectively, consistent with state-by state goals; (2) by August 26, 2008, to develop "a design for a regional market-based multi-sector mechanism, such as a load-based cap and trade program, to achieve

the regional GHG reduction goal;” and (3) to participate in a multi-state GHG registry “to enable tracking, management, and crediting for entities that reduce GHG emissions, consistent with state GHG reporting mechanisms and requirements.”

The Western Climate Initiative (WCI), a regional collaboration between the Governors of Arizona, California, New Mexico, Oregon and Washington and the Canadian provinces of British Columbia and Manitoba (joined in April 2007), has established a regional goal to reduce greenhouse gas (GHG) emissions in the West to 15 percent below 2005 levels by 2020. The regional goal does not replace the individual state’s goals regarding GHG emissions, but rather the WCI members will use the regional goal in the design of the multi-sector market-based mechanism.

Executive Order S-3-05 (June 1, 2005). Executive Order S-3-05 calls for a reduction in GHG emissions to 2000 levels by 2010; 1990 levels by 2020; and for an 80% reduction in GHG emissions below 1990 levels by 2050. It also directs the California Environmental Protection Agency (“CalEPA”) to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy.

California’s Renewable Energy Portfolio Standard Program (2005). In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state’s electricity mix to 20% by 2017. The state’s most recent 2005 Energy Action Plan raises the renewable energy goal from 20% by 2017, to 33% by 2020.

Title 24, Part 6, California Code of Regulations (2005). In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings in order to reduce California’s energy consumption. This program has been partially responsible for keeping California’s per capita energy use relatively constant over the past 30 years.

Assembly Bill 1493 (2002) (Health and Safety Code § 43018.5). AB 1493 required CARB to develop and adopt the nation’s first GHG emission standards for automobiles. Not only have litigants challenged their legality in federal court, but also USEPA denied California’s request for a Clean Air Act waiver to implement its regulations. As of this writing, California and other states who seek to adopt California’s greenhouse gas emissions standards for automobiles are challenging USEPA’s denial in federal court.

Climate Action Registry (2001). California Senate Bills 1771 and 527 created the structure of the California Climate Action Registry (“Registry”), and former Governor Gray Davis signed the final version of the Registry’s enabling legislation into law on October 13, 2001. These bills establish the Registry as a non-profit entity to help companies and organizations establish GHG emissions baselines against which future GHG emission reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual GHG emissions with the Registry. In return for this voluntary action, the State of California promises to offer its “best efforts” to ensure that participants receive consideration for their early action if they are subject to any future state, federal, or international emissions regulatory scheme.

South Coast Air Quality Management District Plans, Policies, Regulations and Laws. The South Coast Air Quality Management District (“SCAQMD”) adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

City of Rancho Cucamonga Plans, Policies, Regulations, and Laws.

The City of Rancho Cucamonga does not have any plans, policies, regulations, significance thresholds or laws addressing climate change at this time. However, the Draft General Plan update addresses climate change in the context of coordinated land use/circulation planning, energy conservation, green building approaches, and sustainable development practices.

3.0 Significance Thresholds

California Air Resource Board Significance Thresholds: The CARB is the lead agency for implementing AB 32. In December 2008, CARB adopted a Proposed Scoping Plan, in coordination with the Climate Action Team (CAT), to establish a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California. The measures in the Scoping plan approved by the Board will be developed over the next two years and be in place by 2020. California is the fifteenth largest emitter of GHGs on the planet, representing about 2% of the worldwide emissions. According to climate scientists, California and the rest of the developed world will have to cut emissions by 80% from today’s levels to stabilize the amount of CO₂ in the atmosphere and prevent the most severe effects of global climate change. This long range goal is reflected in California Executive Order S-3-05 that requires an 80% reduction of greenhouse gases from 1990 levels by 2050. Reducing GHG emissions to 1990 levels means cutting approximately 30% from business-as-usual emissions levels projected for 2020, or about 15% from today’s levels. On a per-capita basis, that means reducing annual emissions of 14 tons

of CO equivalent for every man, woman and child in California down to about 10 tons per person by 2020.

Significant progress can be made toward the 2020 goal through existing technologies, and improving the efficiency of energy use. Other solutions involve improving our state's infrastructure, transitioning to cleaner and more secure sources of energy, and adopting 21st century land use planning and development practices. Key elements of California's recommendations for reducing its greenhouse gas emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standard;
- Achieving a statewide renewable energy mix of 33%;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state's long term commitment to AB 32 implementation.

CARB anticipated 5 million metric tons of CO₂ equivalent (MMTCO₂E) reduction for Regional Transportation-Related Greenhouse Gas Targets.

To meet the 1990 target established by CARB, CARB recommends a *de minimis* (minimal importance) emission threshold of 0.1 MMT annual (100,000 MT per year) CO₂EQ per transportation source category. Source categories whose total aggregated emissions are below this level are not proposed for emission reduction requirements in the Scoping Plan but may contribute toward the target via other means. As each regulation to implement the Scoping Plan is developed, CARB and other agencies will consider more specific *de minimis* levels below which the regulatory requirements would not apply. These levels will consider the cost to comply, especially for small businesses, and other factors. Until approved thresholds and guidelines are adopted at the local and regional level, the proposed *de minimis* threshold of 100,000 MT CO₂EQ per year for transportation sources will be utilized.

In addition to the Proposed Scoping Plan, CARB released the Preliminary Draft Staff Proposal (Staff Proposal) on October 24, 2008 with the objective of developing interim significant thresholds for commercial and residential projects. CARB has already proposed a threshold of 7,000 annual MT for industrial operational sources. However, the Staff Proposal has not yet

developed thresholds applicable for residential and commercial sources. Therefore, criteria for determining threshold levels for residential and commercial sources have yet to be defined. Under CARB's Staff Proposal, recommended approaches for setting interim significant thresholds for GHG under the CEQA are underway. CARB staff proposes to define certain performance standards (e.g., for energy efficiency) by referencing or compiling lists from existing local, state, or national standards. For some sub-sources of GHG emissions (e.g., construction, transportation, waste), CARB staff has not identified reference standards.

The Staff Proposal's Potential Performance Standards and Measures were released in December 2008. Inside the Staff Proposal, CARB's Potential Performance Standard and Measures included some construction measures. These guideline measures are:

- Provide alternative transportation mode options or incentives for workers to and from worksite on days that construction requires 200 or more workers;
- Recycle and/or salvage at least 75% of non-hazardous construction and demolition debris by weight (residential) or by weight in volume (commercial); and
- Use recycled materials for at least 20% of construction materials based on cost for building materials, based on volume for roadway, parking lot, sidewalk and curb material. Recycled materials may include salvaged, reused, and recycled content materials.

CARB's Staff Proposal has identified California Energy Commission's (CEC) Tier II Energy Efficiency goals as an appropriate performance standard for energy use. Under state Law, the CEC is required to establish eligibility criteria, conditions for incentives, and rating standards. Thus, the CEC established energy efficiency standards for homes and commercial structures, and requires new buildings to exceed current building standards by meeting Tier Energy Efficiency goals. Currently, CEC's proposed guidelines for the solar energy incentive program recommend a Tier II goal for residential and commercial projects of a 30% reduction in building combined space heating, cooling, and water heating energy compared to the 2008 Title 24 standards.

Existing green building rating systems like LEED, GreenPoint Rated, the California Green Building Code, and others contain examples of measures that are likely to result in substantial GHG emission reductions from residential and commercial projects. Performance standards that already exist and have been proven to be effective at the local, state, national or international level are preferable. For residential and commercial projects, staff has proposed that the GHG emissions of some projects that meet GHG performance standards might under some circumstances still be considered cumulatively considerable and therefore significant. However, criteria threshold for residential and commercial has yet to be developed.

SCAQMD's Significance Thresholds: In December 5, 2008, the SCAQMD adopted GHG significance threshold for Stationary Sources, Rules and Plans where the SCAQMD is lead agency. The threshold utilizes a tiered approach, with a screening significance threshold of 10,000 MTCO_{2e}, if project was not part of a general plan's GHG reduction plan. The SCAQMD has also developed draft thresholds for commercial and residential projects where it is not the lead. The draft recommends a 3,000 MTCO_{2e}/yr screening threshold. The SCAQMD's working group has not set a date for finalizing the recommendations.

4.0 Short term Construction Emissions

The General Plan update does not involve any construction activity. However, construction activities that implement land use policies over the long term will produce GHG emissions. The primary source of GHG emissions generated by construction activities is from use of diesel-powered construction equipment and other combustion sources (i.e., generators, worker vehicles, materials delivery, etc.). The GHG air pollutants emitted by construction equipment would primarily be carbon dioxide.¹

Typical emission rates for construction equipment were obtained from URBEMISv9.2.4 (Urban Emissions Model Version 9.2.4) which was released by CARB in 2008. URBEMIS is a computer program that can be used to estimate emissions including operation (vehicle and area) sources, as well as construction projects associated with land development projects in California.

While the URBEMISv9.2.4 model does not include other GHG emissions generated by the proposed project (such as CH₄, N₂O, and Fluorinated Gases), CO₂ emissions comprise approximately 99.6% of emissions from burning diesel fuel. Consequently, non-CO₂ GHG emissions represent a very small percentage (approximately 0.4%) of the total short-term construction GHG emissions and would not represent a significant source of GHG emissions over time, even when combined with CO₂ emissions. Therefore, non-CO₂ construction GHG emissions have not been quantified in this analysis.

The City General Plan (GP) Update encompasses a total of approximately 14,016 acres. The proposed GP Update Target Density has the most probable level of development, and therefore, will be addressed. The Target Density entails a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

Construction activities that implement land use policies associated with the GP Update over the long term will produce GHG emissions. No specific project development are proposed at this time and specific details regarding the scheduling of grading activities are unknown, and therefore, the construction emissions cannot be quantified. Construction emissions will need to be evaluated on a project-by-project basis, when more construction details are developed.

5.0 Estimate of Project Greenhouse Gas Emissions

5.1.1 Project Emissions Calculation Methodology

The proposed GP Update GHG emissions were calculated using the URBEMIS2007 program (version 9.2.4). The program was set to calculate emissions for the entire proposed GP Update. Default URBEMIS2007 variables were used for the calculations including the trip generation

¹ When one gallon of diesel fuel is burned it produces 22.384 pounds of CO₂, 0.000534 pounds of CH₄, and 0.0001928 pounds N₂O. Based on the global warming potential of 21 for CH₄ and 310 for N₂O relative to CO₂, the total pounds of CO₂-equivalent (CO₂EQ) emissions from diesel fuel is 22.455 CO₂EQ/gallon, which is 99.6% of the total emissions. Bay Area Air Quality Management District (BAAQS), *Source Inventory of Bay Area Greenhouse Gas Emissions*, November 2006.

rates. The project's land uses were obtained from the City of Rancho Cucamonga, October 2009. The Target Density scenario was analyzed because it has the most probable level of development.

The proposed GP Update (Target Density) comprises a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 25,367,700 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses.

URBEMIS2007 calculates annual average emissions in tons per year. The emissions in tons per year are then converted to metric tons per year. The land uses in terms of dwelling units and square footages as well as default emission factors utilized in calculating the emissions are provided in the appendix.

5.1.2 Projected GHG Emissions

The primary source of GHG emissions generated will be from motor vehicles. Hearth emissions from wood burning stoves and fireplaces would also be significant. While hearth emissions calculated utilizing the URBEMIS default assumptions are very high, it is the best methodology available to use. Hearth URBEMIS default assumptions were adjusted to account for an increase of 7,797 new residential units over Existing G.P. assuming all new residences would utilize natural gas fireplaces. In general, emissions are substantially higher than it would be without hearth emissions. Emissions from combustion of natural gas for space and water heating, as well as off-site GHG emissions from the generation of electricity consumed by the project would be secondary.

The project emissions were analyzed for the Target Density scenario for buildout year 2030. For the purpose of comparison, the Existing Conditions and Existing GP (2030) were also calculated. The results of the project emissions are presented in Table 4. The project net increase emissions are also presented relative to Existing Conditions and Existing GP. The data utilized in calculating the emissions are provided in the appendix.

The most notable GHGs are CH₄ and CO₂. N₂O is another greenhouse gas. However, emission rates for most sources of N₂O are not available, and they appear to be minuscule (account for only 0.1% or less of the greenhouse gas emissions for this type of project). As a result, N₂O emissions are not included in this report.

Table 3
Total Emissions

Source	CO2 MT/Year
<u>Existing (2009)</u>	
-Vehicular Emissions	2,413,872
-Natural Gas Combustion	194,605
-Hearth	6,532
-Landscaping	431
Existing Emissions:	2,615,439
<u>Existing GP (2030)</u>	
-Vehicular Emissions	2,749,625
-Natural Gas Combustion	206,453
-Hearth	6,504
-Landscaping	410
Total Emissions:	2,962,991
<i>Net Increase Over Existing:</i>	347,552
<u>Proposed GP (2030)</u>	
-Vehicular Emissions	2,825,220
-Natural Gas Combustion	230,348
-Hearth	7,263
-Landscaping	481
Total Emissions:	3,063,312
<i>Net Increase over Baseline:</i>	447,872
<i>Net Increase over Ex. G.P.</i>	100,320

NOTE: URBEMISv9.2.4 model does not include other GHG emissions (such as CH₄, N₂O, and Fluorinated Gases). These non-CO₂ represent a very small percentage of the total GHG emissions.

Table 3 presents the annual GHG emissions (as expressed in CO₂ equivalents) for the Baseline (2009), Existing GP and proposed GP Update. The GHG emissions are projected to be 2,615,436 metric tons (MT) for the Baseline, 2,962,993 MT for the Existing GP, and 3,063,312 MT for the proposed GP Update. Table 3 reveals that the proposed GP Update results in net emission increases of 447,872 MT when compared to the Baseline, and 100,320 MT when compared to the Existing GP. Table 3 shows that over 92% of the project's GHG emissions are projected to be from motor vehicles. Natural gas consumption accounts for almost 8% of the GHG emissions, and other area source emissions are negligible. The project net increases in emissions are above the 100,000 MT threshold that CARB has set for transportation projects. Since the proposed General Plan is an areawide project, similar to most transportation projects, the CARB threshold is the most relevant.

The GHG emissions were also projected for future years beyond 2030 and are presented in Table 4. The analysis indicates that there will be an increase in GHG emissions between 2030 and 2040. This is likely a conservative estimate since newer and more fuel-efficient models of automobiles are released in the coming years. Neither the U.S. EPA nor CARB currently regulates CO₂ emissions, and therefore, the likely potential reductions are not included in the forecasts.

Table 4
Project Trend GHG Emissions
(metric tons per year of CO₂)

Year	MT CO ₂
2030	3,063,312
2040	3,126,973

Table 5 compares the GHG emissions from the project to total emissions in California, the United States, and globally. This comparison shows that the project represents a very small fraction of total GHG emissions.

Table 5
Comparison of Project Emissions Global Emissions

	MMT CO ₂ EQ	Year
Project Emissions	3.06	2030
State of California	478	2004
United States	7,017	2006
World	33,326	2006

The emissions generated by this project will be negligible relative to overall emissions at all levels. By way of comparison, the global data from the United Nations indicates that the project would contribute less than 0.01% to the GHG burden for the planet. Even when compared to California's GHG emissions, the contribution from the project would be miniscule, approximately 0.64% of 2004 California emissions. Therefore, for the purposes of this analysis, global climate change impacts will be considered at the cumulative level to consider whether any potential increase in GHG emissions that may be associated with the project over the current physical baseline should be considered significant on a cumulative basis.

According to the comment letter issued by the California Attorney General, Jerry Brown, on the Coyote Valley Specific Plan, cumulative impacts should be considered. The letter states, "Global warming is a quintessentially cumulative impact, caused by the added effects of countless individual projects at the local, regional, state, national, and international level." If the General Plan update is considered in more of the regional context, it must be asked whether the project will in fact generate new emissions or whether it actually results in a more efficient regional land use plan. For the proposed GP Update, new emissions in comparison to the 2009

Baseline emissions will be generated on the order of 447,872 metric tons per year. This is above the CARB *de minimis* thresholds for transportation sources. Consequently, the project will result in a significant cumulative impact.

The Attorney General letter continues with another benchmark for causing a significant impact. The Attorney General states, “Where a project’s direct and indirect GHG-related effects, considered in the context of the existing and projected cumulative effects, may interfere with California’s ability to achieve its GHG reduction requirements [as required by AB 32], the project’s global warming-related impacts must be considered cumulatively significant.” No regulations have yet been promulgated as a result of AB 32. So far, CARB’s indication is that the first wave of regulations will address emissions from major industrial and agricultural sources. CARB is also very likely to promote requirements for motor vehicles, via new emission controls and increased fuel economy that would significantly lower GHG emissions in future years. Passage of SB375 may eventually result in regional targets on emissions and land use development; however, no limits have been set at this time. This project would, of course, comply with any regulations promulgated as a result of SB 375; however, no targets have as yet been imposed. Thus, this project cannot be seen as interfering with “California’s ability to achieve its GHG reduction requirements” since regional targets have not been developed. So although AB32 and SB375 do not specifically required that this project be identified as having a significant impact, the sheer increase in emissions in comparison to the threshold available at this time indicates that the project GHG impacts should be considered significant.

6.0 Recommended Conditions of Approval

Mitigation measures are required since the project results in a significant and unavoidable cumulative impact. GHG emissions are a significant global, national, state, and local factor contributing to climate change. Therefore, the City will consider actions that reduce GHG emissions for all projects. The City has been very active in developing GHG reduction measures and sustainability measures that will reduce further the GHG emissions. The emission reductions that will be obtained from these measures cannot be quantified at this time. The City has adopted the following measures.

6.1 City of Rancho Cucamonga Green Team Sustainability Action Matrix

Climate Protection

- Complete and maintain tree inventory with goal of increasing amount of trees in city.
- Update CEQA checklist to incorporate climate change and greenhouse gas issues.
- Support County of San Bernardino Green Valley Initiative.
- Determine the carbon footprint of City operations, develop programs, goals and a timeline to improve the baseline, and ensure that all actions are eligible for early implementation credit under AB 32.
- Prohibit wood-burning fireplaces in new development.

Green Buildings

- Develop a program, goals and timeline to move City operations towards net-zero and grid neutral.
- Energy Efficient Appliances, Electrical, and Mechanical Equipment Program allows for permit fee waiver for installation of energy efficient appliances and other mechanical equipment and provides for green building certification for two inspectors. ARRA funded.
- Home Improvement Program Energy Efficiency Revolving Loan providing low-income residents with loans for energy efficient upgrades.

Energy

- Adopt a resolution requiring at least 20% of City energy electricity purchases to be renewable by 2010 and 33% by 2020.
- Retrofit city red traffic signal lights with LEDs.
- Retrofit green and yellow city traffic signal lights with LEDs as replacements are needed.
- Design all new City buildings to maximize cost-effective energy efficiency.
- Retrofit all City facilities with energy-efficient lighting and lighting controls.
- Complete an HVAC Comprehensive Study to ensure facilities' HVAC systems run at maximum efficiency. As part of this effort, replace large City building pumps and electric motors with "variable speed drives" which respond to demand, and modernize the Civic Center's system to replace the old and inefficient compressors.
- Offer RCMU customers energy audits of their facilities.
- Offer RCMU customers rebates for lighting retrofits, HVAC tune-up, and solar installations.
- Replace gas-powered grounds maintenance mowers with electric whenever possible.
- Retrofit park lighting with efficient fixtures.
- Generate a baseline of City energy usage and cost; develop a plan, including goals and a timeline, to maximize energy efficiency and the use of cost-effective alternate sources of energy.
- Explore additional opportunities for the use of renewable energy sources, including solar electricity, solar hot water and wind, especially near the Cajon Pass.
- Research energy efficiency of City street lights (solar and LED).
- Monitor developing energy efficiency technologies, including LEDs for lighting and new solar systems.

Waste Management

- Reduce amount of paper waste. Reduce number of agenda packets produced. Post financial documents online. Transition to electronic format for City Manager's Weekly.
- Enact an ordinance requiring construction and demolition projects to divert 50% of waste. Require permittees to pay a diversion deposit. Provide residents with three collection containers (recyclables, green waste, and trash). Provide programs for businesses, multi-unit residences, and school programs to meet the needs of the facilities.
- Institute Environmentally Friendly Street Overlay Practices – Street paving material composed of recycled materials such as tires.
- Institute policy regarding Environmentally Friendly Play Surfaces – Require all City parks to be built with rubberized play surfaces made from recycled tires.

Transportation

- Implement 4/10 work schedule to reduce employee driving.
- Install electric vehicle charging stations (The City installed 21 electric vehicle charging stations in high traffic City facilities and parks, including the Civic Center and the Metrolink Train Station.)
- Replace gas-powered utility carts with electric carts (15 replaced so far).
- Replace City vehicles with new energy and/or fuel efficient models such as hybrid electric vehicles when replacing vehicles or increasing the City's fleet (City has 6 hybrids, and plans to acquire 22 more).
- Replace diesel-powered vehicles with Compressed Natural Gas (CNG) vehicles, including street sweepers, dump trucks, heavy trucks, fire equipment, and tractors. (Anticipates all to be replaced by 2020).
- Build a CNG fueling station to serve the new Green fleet. Explore options of extending access to other public agencies and public.
- Utilize automatic vehicle locator (AVL) technology to optimize City vehicle routing.
- Expand the partnerships with all local and regional transit and transportation agencies and other organizations to maintain and enhance local transportation options.
- Partner with local transit agencies to promote use of public transportation.
- Explore employee bicycling programs.
- Explore providing shuttle linking hotels, commercial centers and civic center.
- Provide carpool and explore vanpool opportunities for City employees.

Procurement

- Use of online/electronic procurement
- Fleet optimization: assisting Fleet to procure vehicles that includes providing gas efficient vehicles, replacing vehicles when needed, etc.
- When opportunities arise, reconfigure office space to create better working environments, i.e., views and natural light.
- Incorporate sustainability goals into Ordinance, Purchasing Manual and Policy.
- Develop a policy to only purchase Energy Star-rated or higher energy-efficient equipment.

Education

- Educate all City employees on good sustainability practices.
- Educate all City Employees on current and future sustainability policies.
- Promote the City's green efforts to the community and other stakeholders.
- Facilitate partnerships with the city's businesses to encourage the implementation of green practices.
- Continue to partner with the Green Valley Initiative to develop green collar economic development and job opportunities.
- Explore all appropriate partnerships with public agencies, school districts, utility companies, and other organizations in order to maximize sustainability education initiatives (essential partners) .
- Report annually on the status of the Sustainability Action Plan.
- Document budgetary decisions that lead to sustainability/ provide cost savings/ productivity/efficiency.

- Develop a Recognition Program to honor local businesses and others who practice sustainability initiatives.
- Take advantage of City events to promote sustainability.

6.2 Regional Plans and Initiatives

There are two plans that are regional in nature that the City's participation in would help reduce greenhouse gas emissions. The first program would be to help establish San Bernardino and Riverside Counties as a leader in developing green technologies, and is referred to as the Green Valley Initiative. The other program is being developed locally by the San Bernardino Association of Governments (SANBAG), and is essentially the regional planning necessary for compliance with AB 32 and SB 375.

Green Valley Initiative

The City of Rancho Cucamonga will participate in the San Bernardino County Green Valley Initiative (GVI). The GVI is a regional business and economic development initiative to promote investment in Riverside and San Bernardino counties and to establish the region as a leader in green and clean technologies. Its mission is to create jobs, greater opportunities, and a higher quality of life in the Inland Empire. It seeks to transform the Inland Empire into the nation's leader in emerging industries of renewable energy, green technology and recyclable material. This effort will bring green technologies and sustainable practices to the Inland Empire while reducing the region's long commutes, under-utilized resources and non-cohesive business and land-use practices.

Regional Planning for SB 375

SCAG, the Metropolitan Planning Organization for a six-county area that also includes Los Angeles, Imperial, Orange, Riverside, and Ventura counties, is responsible for preparation and approval of the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) based on input from SANBAG and its sister agencies in the other counties. Work began in January 2009 on the next RTP, scheduled for adoption in Spring 2012. This will be the first RTP developed pursuant to SB 375, that includes requirements for inclusion of a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy to meet a greenhouse gas (GHG) emission reduction target for light and medium duty vehicles and for integration of the growth forecast for the RTP with the Regional Housing Needs Assessment (RHNA).

SB 375 provides that subregions and transportation commissions can develop their own subregional SCS to be integrated into the region plan and are also delegated RHNA responsibilities if they choose to do so. Thus far, financial support from state sources to support this work is lacking. Final regional targets are scheduled to be established by CARB by October 1, 2010, but SCAG is requesting subregional commitments to prepare subregional SCSs by the later part of 2009. SANBAG has developed and maintained land use databases and planning tools and coordinated local agency input to support regional growth forecasts and RHNA's, and will do so on the 2012 RTP as well. In addition, SANBAG, in cooperation with SCAG and many member agencies, has recently completed a multi-jurisdictional COMPASS implementation study that is expected to provide a basis for the SCS within San Bernardino County. SCAG's

Compass Blueprint 2% Strategy seeks to promote integration of land use and transportation in order to make efficient use of infrastructure investments for new higher density and mixed use development. When this happens, it is expected that regional mobility will improve, neighborhoods will be livable, the community will prosper and the region will be sustainable.

The City of Rancho Cucamonga will actively participate in the development of the SCS and agree to comply with the requirements of the plan.

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- SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008
- State of California Department of Water Resources (DWR), Climate Change Adaptation Strategies for California’s Water, October 2008
- City of Rancho Cucamonga, “2001 General Plan” and “Green Team Sustainability Action Matrix”, November 2009.
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Appendix

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\RnchCucamongaEX.urb924

Project Name: Rancho Cucamonga Existing Conditions

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	816.61	177.76	693.21	0.83	47.70	45.94	222,186.55

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	2,871.98	4,763.97	32,352.49	26.56	300.45	207.47	2,660,793.48

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3,688.59	4,941.73	33,045.70	27.39	348.15	253.41	2,882,980.03

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	12.98	169.68	83.55	0.00	0.32	0.32	214,511.38
Hearth	111.60	5.17	300.63	0.82	46.56	44.81	7,199.68
Landscape	55.47	2.91	309.03	0.01	0.82	0.81	475.49
Consumer Products	521.19						
Architectural Coatings	115.37						
TOTALS (tons/year, unmitigated)	816.61	177.76	693.21	0.83	47.70	45.94	222,186.55

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	727.70	1,188.72	8,201.31	6.65	75.10	51.91	665,636.79
Apartments low rise	50.23	80.31	554.11	0.45	5.07	3.51	44,973.13
Condo/townhouse general	240.78	385.02	2,656.34	2.15	24.33	16.81	215,594.36
High school	57.36	96.82	646.64	0.54	6.08	4.19	53,780.60
City park	1.30	1.65	10.96	0.01	0.10	0.07	912.80
Free-standing discount superstore	144.32	252.79	1,679.82	1.40	15.84	10.93	140,078.45
Regnl shop. center	378.52	661.74	4,397.36	3.65	41.47	28.60	366,691.85
Strip mall	86.60	151.39	1,006.03	0.84	9.49	6.54	83,892.33
General office building	89.34	149.39	1,011.71	0.83	9.43	6.51	83,537.57
Government office building	151.27	265.40	1,772.60	1.47	16.66	11.50	147,425.57
Government (civic center)	115.36	199.75	1,334.09	1.11	12.54	8.65	110,954.38
General light industry	765.89	1,245.79	8,497.56	6.98	78.90	54.49	699,053.29
General heavy industry	63.31	85.20	583.96	0.48	5.44	3.76	48,262.36
TOTALS (tons/year, unmitigated)	2,871.98	4,763.97	32,352.49	26.56	300.45	207.47	2,660,793.48

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2009 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

<u>Land Use Type</u>	<u>Acreage</u>	<u>Trip Rate</u>	<u>Unit Type</u>	<u>No. Units</u>	<u>Total Trips</u>	<u>Total VMT</u>
Single family housing	12,026.67	9.57	dwelling units	36,080.00	345,285.59	3,488,351.24
Apartments low rise	211.31	6.90	dwelling units	3,381.00	23,328.90	235,687.21
Condo/townhouse general	1,013.00	6.90	dwelling units	16,208.00	111,835.20	1,129,848.67

High school	12.89	1000 sq ft	2,378.00	30,652.42	283,994.67
City park	1.59	acres	334.00	531.06	4,823.35
Free-standing discount superstore	49.21	1000 sq ft	1,677.00	82,525.17	740,498.31
Regnl shop. center	42.94	1000 sq ft	5,031.00	216,031.13	1,938,447.28
Strip mall	42.94	1000 sq ft	1,151.00	49,423.94	443,480.98
General office building	11.01	1000 sq ft	3,925.10	43,215.35	439,824.25
Government office building	68.93	1000 sq ft	1,219.00	84,025.67	778,497.81
Government (civic center)	27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry	6.97	1000 sq ft	49,160.00	342,645.19	3,674,869.67
General heavy industry	1.50	1000 sq ft	13,224.00	19,836.00	253,603.26
				1,412,574.42	13,997,834.16

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.2	1.7	98.1	0.2
Light Truck < 3750 lbs	10.0	4.0	91.0	5.0
Light Truck 3751-5750 lbs	20.7	1.0	99.0	0.0
Med Truck 5751-8500 lbs	11.2	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.1	70.7	29.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	7.7	84.6	7.7

Travel Conditions

	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

High school	10.0	5.0	85.0
City park	5.0	2.5	92.5
Free-standing discount superstore	2.0	1.0	97.0
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government office building	10.0	5.0	85.0
Government (civic center)	10.0	5.0	85.0
General light industry	50.0	25.0	25.0
General heavy industry	90.0	5.0	5.0

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\RnchCucamonga ExGP-Target.urb924

Project Name: Rancho Cucamonga Existing General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	833.46	189.07	674.35	0.83	47.47	45.72	235,192.22

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1,149.65	1,213.29	10,748.70	30.19	274.98	176.03	3,030,891.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1,983.11	1,402.36	11,423.05	31.02	322.45	221.75	3,266,083.97

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	13.77	180.75	94.09	0.00	0.34	0.34	227,571.32
Hearth	111.09	5.15	299.48	0.82	46.38	44.64	7,169.04
Landscape	50.26	3.17	280.78	0.01	0.75	0.74	451.86
Consumer Products	519.19						
Architectural Coatings	139.15						
TOTALS (tons/year, unmitigated)	833.46	189.07	674.35	0.83	47.47	45.72	235,192.22

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Single family housing	241.82	252.50	2,275.79	6.30	57.44	36.85	632,609.81
Apartments low rise	20.10	20.37	183.62	0.51	4.63	2.97	51,041.32
Condo/townhouse general	94.30	95.59	861.57	2.39	21.75	13.95	239,494.35
Elementary school	7.30	7.92	69.34	0.20	1.79	1.14	19,712.14
Junior high school	5.40	5.84	51.16	0.14	1.32	0.84	14,543.64
High school	4.41	4.74	41.25	0.12	1.07	0.68	11,767.29
Junior college (2 yrs)	14.41	16.07	139.22	0.40	3.61	2.30	39,795.01
City park	0.57	0.41	3.59	0.01	0.09	0.06	1,026.36
Racquetball/health	2.02	2.27	19.64	0.06	0.51	0.33	5,614.98
Free-standing discount superstore	54.95	62.16	537.46	1.53	13.94	8.90	153,804.54
Regnl shop. center	151.96	171.46	1,482.50	4.22	38.46	24.56	424,241.33
Strip mall	31.37	35.40	306.04	0.87	7.94	5.07	87,578.17
General office building	95.92	102.37	904.80	2.55	23.22	14.86	256,012.32
Office park	19.43	20.81	185.27	0.52	4.74	3.03	52,226.54
Government (civic center)	51.83	57.80	502.66	1.43	13.00	8.31	143,408.27
General light industry	244.46	251.72	2,243.29	6.29	57.34	36.73	632,044.77
General heavy industry	28.71	22.93	205.79	0.58	5.28	3.38	58,197.24
Industrial park	80.69	82.93	735.71	2.07	18.85	12.07	207,773.67
TOTALS (tons/year, unmitigated)	1,149.65	1,213.29	10,748.70	30.19	274.98	176.03	3,030,891.75

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,292.33	9.57	dwelling units	33,877.00	324,202.88	3,275,356.85
Apartments low rise	236.94	6.90	dwelling units	3,791.00	26,157.90	264,268.04
Condo/townhouse general	1,111.75	6.90	dwelling units	17,788.00	122,737.20	1,239,989.40
Elementary school		14.49	1000 sq ft	736.00	10,664.64	102,700.48
Junior high school		13.78	1000 sq ft	571.00	7,868.38	75,772.50
High school		12.89	1000 sq ft	514.00	6,625.46	61,384.89
Junior college (2 yrs)		27.49	1000 sq ft	832.00	22,871.68	207,732.02
City park		1.59	acres	371.00	589.89	5,357.68
Racquetball/health		32.93	1000 sq ft	98.00	3,227.14	29,310.50
Free-standing discount superstore		49.21	1000 sq ft	1,819.00	89,512.99	803,200.01
Regnl shop. center		42.94	1000 sq ft	5,750.00	246,904.99	2,215,478.40
Strip mall		42.94	1000 sq ft	1,187.00	50,969.78	457,351.80
General office building		11.01	1000 sq ft	11,883.00	130,831.83	1,331,540.96
Office park		11.42	1000 sq ft	2,230.00	25,466.60	271,270.23
Government (civic center)		27.92	1000 sq ft	2,892.00	80,744.64	748,099.07
General light industry		6.97	1000 sq ft	43,908.00	306,038.75	3,282,265.61
General heavy industry		1.50	1000 sq ft	15,751.00	23,626.50	302,064.81
Industrial park		6.96	1000 sq ft	14,898.00	103,690.08	1,079,906.26
					1,582,731.33	15,753,049.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5
Racquetball/health				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0
Industrial park				41.5	20.8	37.8

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare\URBEMIS_PROJECTS\RnchCucamonga2030GP-2Target.urb924

Project Name: Rancho Cucamonga Proposed General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	922.42	210.82	760.84	0.92	52.39	50.46	262,446.87

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1,181.80	1,246.66	11,050.44	31.00	282.54	180.90	3,114,219.43

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2,104.22	1,457.48	11,811.28	31.92	334.93	231.36	3,376,666.30

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	15.36	201.35	102.62	0.00	0.38	0.38	253,910.51
Hearth	115.50	5.75	328.63	0.91	51.13	49.21	8,006.31
Landscape	59.17	3.72	329.59	0.01	0.88	0.87	530.05
Consumer Products	592.19						
Architectural Coatings	140.20						
TOTALS (tons/year, unmitigated)	922.42	210.82	760.84	0.92	52.39	50.46	262,446.87

Area Source Changes to Defaults

Percentage of residences with wood fireplaces changed from 5% to 4.4%

Percentage of residences with natural gas fireplaces changed from 85% to 85.6%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	283.72	296.25	2,670.06	7.39	67.39	43.23	742,205.91
Apartments low rise	28.33	28.72	258.89	0.72	6.53	4.19	71,964.09
Condo/townhouse general	95.08	96.39	868.74	2.41	21.93	14.07	241,486.99
Mobile home park	0.90	0.88	7.92	0.02	0.20	0.13	2,200.53
High school	20.83	22.42	194.99	0.55	5.04	3.22	55,631.36
City park	0.68	0.50	4.31	0.01	0.11	0.07	1,231.08
Free-standing discount superstore	53.92	61.00	527.42	1.50	13.68	8.74	150,929.69
Regnl shop. center	173.24	195.46	1,690.05	4.81	43.85	28.00	483,635.12
Strip mall	34.15	38.53	333.11	0.95	8.64	5.52	95,325.18
General office building	96.64	103.15	911.66	2.57	23.40	14.97	257,951.32
Office park	13.04	13.97	124.37	0.35	3.18	2.04	35,059.70
Government (civic center)	40.59	45.27	393.68	1.12	10.18	6.51	112,316.64
General light industry	239.36	246.47	2,196.54	6.16	56.15	35.96	618,873.57
General heavy industry	28.29	22.59	202.81	0.57	5.20	3.33	57,354.81
Industrial park	73.03	75.06	665.89	1.87	17.06	10.92	188,053.44
TOTALS (tons/year, unmitigated)	1,181.80	1,246.66	11,050.44	31.00	282.54	180.90	3,114,219.43

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	13,248.67	9.57	dwelling units	39,746.00	380,369.21	3,842,794.03
Apartments low rise	334.06	6.90	dwelling units	5,345.00	36,880.50	372,596.32
Condo/townhouse general	1,121.00	6.90	dwelling units	17,936.00	123,758.40	1,250,306.38

Mobile home park	37.67	4.99	dwelling units	226.00	1,127.74	11,393.33
High school		12.89	1000 sq ft	2,430.00	31,322.70	290,204.81
City park		1.59	acres	445.00	707.55	6,426.32
Free-standing discount superstore		49.21	1000 sq ft	1,785.00	87,839.85	788,186.93
Regnl shop. center		42.94	1000 sq ft	6,555.00	281,471.69	2,525,645.38
Strip mall		42.94	1000 sq ft	1,292.00	55,478.48	497,808.36
General office building		11.01	1000 sq ft	11,973.00	131,822.73	1,341,625.85
Office park		11.42	1000 sq ft	1,497.00	17,095.74	182,103.82
Government (civic center)		27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry		6.97	1000 sq ft	42,993.00	299,661.20	3,213,866.39
General heavy industry		1.50	1000 sq ft	15,523.00	23,284.50	297,692.34
Industrial park		6.96	1000 sq ft	13,484.00	93,848.64	977,410.12
					1,627,907.73	16,183,967.84

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	44.2	0.0	100.0	0.0
Light Truck < 3750 lbs	9.9	0.0	99.0	1.0
Light Truck 3751-5750 lbs	21.8	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.1	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.3	0.0	82.6	17.4
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	2.1	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.0	32.5	67.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High school				10.0	5.0	85.0
City park				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0
Industrial park				41.5	20.8	37.8

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Environmental Svcs\Desktop\EnvSrvShare_URBEMIS_PROJECTS\RnchCucamonga2030GP-2Target.urb924

Project Name: Rancho Cucamonga Proposed General Plan-Target

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	922.43	210.82	760.84	0.92	52.39	50.46	262,446.87

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	984.62	1,050.62	9,257.34	31.17	283.77	181.08	3,184,393.26

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1,907.05	1,261.44	10,018.18	32.09	336.16	231.54	3,446,840.13

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	15.36	201.35	102.62	0.00	0.38	0.38	253,910.51
Hearth	115.50	5.75	328.63	0.91	51.13	49.21	8,006.31
Landscape	59.17	3.72	329.59	0.01	0.88	0.87	530.05
Consumer Products	592.19						
Architectural Coatings	140.21						
TOTALS (tons/year, unmitigated)	922.43	210.82	760.84	0.92	52.39	50.46	262,446.87

Area Source Changes to Defaults

Percentage of residences with wood fireplaces changed from 5% to 4.4%

Percentage of residences with natural gas fireplaces changed from 85% to 85.6%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	236.32	249.64	2,237.29	7.44	67.69	43.28	758,908.87
Apartments low rise	23.55	24.21	216.93	0.72	6.56	4.20	73,583.61
Condo/townhouse general	79.04	81.22	727.93	2.42	22.02	14.08	246,921.54
Mobile home park	0.75	0.74	6.63	0.02	0.20	0.13	2,250.06
High school	17.35	18.89	163.31	0.56	5.07	3.23	56,886.50
City park	0.55	0.42	3.61	0.01	0.11	0.07	1,258.87
Free-standing discount superstore	45.05	51.39	441.69	1.51	13.74	8.75	154,336.11
Regnl shop. center	144.73	164.68	1,415.35	4.84	44.03	28.02	494,550.56
Strip mall	28.53	32.46	278.97	0.95	8.68	5.52	97,476.63
General office building	80.61	86.94	763.70	2.58	23.50	14.99	263,765.63
Office park	10.89	11.78	104.19	0.35	3.19	2.04	35,849.62
Government (civic center)	33.90	38.14	329.72	1.12	10.23	6.51	114,850.70
General light industry	199.33	207.78	1,840.25	6.20	56.40	36.00	632,816.33
General heavy industry	23.24	19.06	169.93	0.57	5.22	3.33	58,646.93
Industrial park	60.78	63.27	557.84	1.88	17.13	10.93	192,291.30
TOTALS (tons/year, unmitigated)	984.62	1,050.62	9,257.34	31.17	283.77	181.08	3,184,393.26

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2040 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	13,248.67	9.57	dwelling units	39,746.00	380,369.21	3,842,794.03
Apartments low rise	334.06	6.90	dwelling units	5,345.00	36,880.50	372,596.32

Condo/townhouse general	1,121.00	6.90	dwelling units	17,936.00	123,758.40	1,250,306.38
Mobile home park	37.67	4.99	dwelling units	226.00	1,127.74	11,393.33
High school		12.89	1000 sq ft	2,430.00	31,322.70	290,204.81
City park		1.59	acres	445.00	707.55	6,426.32
Free-standing discount superstore		49.21	1000 sq ft	1,785.00	87,839.85	788,186.93
Regnl shop. center		42.94	1000 sq ft	6,555.00	281,471.69	2,525,645.38
Strip mall		42.94	1000 sq ft	1,292.00	55,478.48	497,808.36
General office building		11.01	1000 sq ft	11,973.00	131,822.73	1,341,625.85
Office park		11.42	1000 sq ft	1,497.00	17,095.74	182,103.82
Government (civic center)		27.92	1000 sq ft	2,265.00	63,238.80	585,907.46
General light industry		6.97	1000 sq ft	42,993.00	299,661.20	3,213,866.39
General heavy industry		1.50	1000 sq ft	15,523.00	23,284.50	297,692.34
Industrial park		6.96	1000 sq ft	13,484.00	93,848.64	977,410.12
					1,627,907.73	16,183,967.84

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	42.0	0.0	100.0	0.0
Light Truck < 3750 lbs	10.3	0.0	100.0	0.0
Light Truck 3751-5750 lbs	22.7	0.0	100.0	0.0
Med Truck 5751-8500 lbs	12.7	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	81.0	19.0
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	2.5	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.3	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	2.6	0.0	92.3	7.7

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

High school				10.0	5.0	85.0
City park				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0
Industrial park				41.5	20.8	37.8

Greenhouse Gas Emissions Calculations

BonTerra Consulting

February 4, 2010

Source	Annual CO2 Emissions					
	Existing 2009		Existing General Plan 2030		Proposed General Plan 2030	
	MTCO2	percent	MTCO2	percent	MTCO2	percent
Residential Electricity	133,457	3.7%	132,922	3.4%	151,096	3.6%
Retail Electricity	58,153	1.6%	51,618	1.3%	63,263	1.5%
Office Electricity	83,767	2.3%	36,497	0.9%	77,511	1.9%
Industrial Electricity	266,330	7.4%	318,300	8.1%	307,383	7.4%
School Electricity	6,638	0.2%	7,406	0.2%	6,783	0.2%
Residential Water Consumption	24,266	0.7%	24,168	0.6%	27,473	0.7%
Commercial Water Consumption	47,667	1.3%	48,644	1.2%	52,493	1.3%
Residential Solid Waste Disposal	187,190	5.2%	186,440	4.7%	211,931	5.1%
Commercial Solid Waste Disposal	174,409	4.8%	177,983	4.5%	192,069	4.6%
Natural Gas, Hearth, and Landscape Maintenance	201,563	5.6%	213,457	5.4%	238,092	5.7%
Vehicle Trips	2,413,872	67.1%	2,749,625	69.7%	2,825,220	68.0%
TOTAL	3,597,312	100.0%	3,947,059	100.0%	4,153,315	100.0%
Increase over Existing 2009			349,748	9.7%	556,003	15.5%
Increase over Existing GP 2030					206,256	5.2%

RANCHO CUCAMONGA - GREENHOUSE GAS EMISSIONS - EXISTING GENERAL PLAN 2030

Emission Source	Quantity	Unit	Annual Usage Factor	Annual Use	Total Estimated Annual Emissions		Percent of New Emissions
					kg CO2	MTCO ₂	
Proposed Project at Buildout							
Residential Electricity	55,446	residence	7,300 kwh/res/yr	404,755,800 kwh/yr	132,922,159	132,922	3.4%
Retail Electricity	7,859	ksf	20.00 kwh/gsf/yr	157,180,000 kwh/yr	51,618,050	51,618	1.3%
Office Electricity	7,409	ksf	15.00 kwh/gsf/yr	111,135,000 kwh/yr	36,496,831	36,497	0.9%
Industrial Electricity	74,557	ksf	13.00 kwh/gsf/yr	969,241,000 kwh/yr	318,299,593	318,300	8.1%
School Electricity	2,653	ksf	8.50 kwh/gsf/yr	22,550,500 kwh/yr	7,405,604	7,406	0.2%
Residential Water Consumption	55,446	residence	110,000.0 gallons/yr/res	6,099.06 MG/yr 73,594,307 kwh/year	24,168,435	24,168	0.6%
Commercial Water Consumption	92,478	ksf	123.0 gallons/yr/gsf	11,374.8 MG/yr 148,122,567 kwh/year	48,643,581	48,644	1.2%
Residential Solid Waste Disposal	55,446	residence	12.23 Lb/day/residence	123,839 ton/year	from EPA WARM	186,440	4.7%
Commercial Solid Waste Disposal	92,478	ksf	0.007 lb/day/sf	118,222 ton/yr	from EPA WARM	177,983	4.5%
Natural Gas, Hearth, and Landscape Maintenance	from MGA report					213,457	5.4%
Vehicle Trips	from MGA report					2,749,625	69.7%
Total, Proposed Project Buildout						3,947,059 MTCO₂	100%

Total, Existing Land Uses	3,597,312 MTCO₂
Net Increase in Emissions = Existing GP 2030 - Existing 2009	349,748 MTCO₂
Percentage Increase in Annual Emissions: Existing 2009 to Existing GP 2030	9.7%

Usage Factors	Unit	Quantity	Source
Residential Electricity	kwh/res/yr	7,300	
Commercial Electricity	kwh/gsf/yr	13.63	
Hotel Electricity	kwh/gsf/yr	13.28	
Residential Water	gal/yr/res	110,000	
Commercial Water	gal/yr/gsf	123	
Hotel Water	gal/day/room	150	many

Emission Category	CO2 Emission Factor
Purchased Electricity	0.72 lbs/kwh
Emergency Diesel Generators	9.96 kg/gallon
Propane Liquid Gas	5.67 kg/gallon
Purchased Campus Natural Gas	53.06 kg/MMBTU

Water	Energy Usage Factor
Indoor Potable Water Consumption	13,022 kwh/MG
Outdoor Potable Water Consumption	11,111 kwh/MG

CCAR GRP 3.1

CCAR GRP 3.1

Convert...

Pounds to Metric Tons, multiply pounds by:	0.000453592
Tons to Metric Tons, multiply tons by:	0.90718474
Kilogram to pounds, multiply kg by:	2.2046
Pound to kilograms, multiply lbs. by:	0.45359237
kilogram to Metric Tons, multiply kg by:	0.001
kBTU to kilowatt hours, multiply kBTU by:	0.293071083
kBTU to megawatt hours, multiply kBTU by:	0.000293071
CCF to gallons, multiply CCF by	748

Notes:

kwh = kilowatt hour

gsf = gross square foot

ksf = thousand square feet

mmbTU = million British Thermal Units

MG = million gallons

kg = kilogram

CO₂ = carbon dioxide

MT = Metric Tons

RANCHO CUCAMONGA - GREENHOUSE GAS EMISSIONS - PROPOSED GENERAL PLAN 2030

Emission Source	Quantity	Unit	Annual Usage Factor	Annual Use	Total Estimated Annual Emissions		Percent of New Emissions
					kg CO2	MTCO ₂	
Proposed Project at Buildout							
Residential Electricity	63,027	residence	7,300 kwh/res/yr	460,097,100 kwh/yr	151,096,291	151,096	3.6%
Retail Electricity	9,632	ksf	20.00 kwh/gsf/yr	192,640,000 kwh/yr	63,263,145	63,263	1.5%
Office Electricity	15,735	ksf	15.00 kwh/gsf/yr	236,025,000 kwh/yr	77,510,817	77,511	1.9%
Industrial Electricity	72,000	ksf	13.00 kwh/gsf/yr	936,000,000 kwh/yr	307,383,220	307,383	7.4%
School Electricity	2,430	ksf	8.50 kwh/gsf/yr	20,655,000 kwh/yr	6,783,120	6,783	0.2%
Residential Water Consumption	63,027	residence	110,000.0 gallons/yr/res	6,932.97 MG/yr 83,656,683 kwh/year	27,472,928	27,473	0.7%
Commercial Water Consumption	99,797	ksf	123.0 gallons/yr/gsf	12,275.0 MG/yr 159,845,454 kwh/year	52,493,387	52,493	1.3%
Residential Solid Waste Disposal	63,027	residence	12.23 Lb/day/residence	140,771 ton/year	from EPA WARM	211,931	5.1%
Commercial Solid Waste Disposal	99,797	ksf	0.007 lb/day/sf	127,578 ton/yr	from EPA WARM	192,069	4.6%
Natural Gas, Hearth, and Landscape Maintenance	from MGA report					238,092	5.7%
Vehicle Trips	from MGA report					2,825,220	68.0%
Total, Proposed Project Buildout						4,153,315 MTCO₂	100%

Total, Existing Land Uses	3,597,312 MTCO₂
Net Increase in Emissions = Proposed GP 2030 - Existing 2009	556,003 MTCO₂
Percentage Increase in Annual Emissions: Existing 2009 to Existing GP 2030	15.5%

Usage Factors	Unit	Quantity	Source
Residential Electricity	kwh/res/yr	7,300	
Commercial Electricity	kwh/gsf/yr	13.63	
Hotel Electricity	kwh/gsf/yr	13.28	
Residential Water	gal/yr/res	110,000	
Commercial Water	gal/yr/gsf	123	
Hotel Water	gal/day/room	150	many
Emission Category	CO2 Emission Factor		
Purchased Electricity	0.72	lbs/kwh	CCAR GRP 3.1
Emergency Diesel Generators	9.96	kg/gallon	
Propane Liquid Gas	5.67	kg/gallon	
Purchased Campus Natural Gas	53.06	kg/MMBTU	CCAR GRP 3.1
Water	Energy Usage Factor		
Indoor Potable Water Consumption	13,022	kwh/MG	
Outdoor Potable Water Consumption	11,111	kwh/MG	

Convert...

Pounds to Metric Tons, multiply pounds by:	0.000453592
Tons to Metric Tons, multiply tons by:	0.90718474
Kilogram to pounds, multiply kg by:	2.2046
Pound to kilograms, multiply lbs. by:	0.45359237
kilogram to Metric Tons, multiply kg by:	0.001
kBTU to kilowatt hours, multiply kBTU by:	0.293071083
kBTU to megawatt hours, multiply kBTU by:	0.000293071
CCF to gallons, multiply CCF by	748

Notes:

kwh = kilowatt hour

gsf = gross square foot

ksf = thousand square feet

mmBTU = million British Thermal Units

MG = million gallons

kg = kilogram

CO₂ = carbon dioxide

MT = Metric Tons

Appendix E
Cultural Resources Reports

Appendix E-1

San Bernardino Archaeological Information Center Records Search

Document No.: 1060001
[SAN BERNARDINO COUNTY MUSEUM ASSOCIATION]

Unpublished Report

1976 CHAPTER FIVE, CAMP CAJON. UNKNOWN. SUBMITTED TO UNKNOWN.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 10/02/1992
Document No.: 1060143
SMITH, GERALD A.

Cataloged by: WRO-CA-03 on 10/21/1988
Unpublished Report

1973 TURNER TERRACE APARTMENTS. SAN BERNARDINO COUNTY MUSEUM. SUBMITTED
TO SAN BERNARDINO COUNTY PLANNING DEPARTMENT. UNPUBLISHED REPORT ON FILE
AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/14/1988
Document No.: 1060171
SIMPSON, RUTH AND BETTY MOORE

Cataloged by: WRO-CA-03 on 11/14/1988
Unpublished Report

1973 ENVIRONMENTAL IMPACT REPORT: PROPOSED P.U.D., 4 UNITS/ACRE,
CUCAMONGA (85-79), RED HILL CONDOMINIUM SITE. SAN BERNARDINO COUNTY
MUSEUM ASSOCIATION. SUBMITTED TO HARNISH, MORGAN AND CAUSEY ARCHITECTS.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 11/14/1988
Document No.: 1060184
SCHUILING, WALTER C.

Cataloged by: WRO-CA-03 on 11/14/1988
Unpublished Report

1973 ENVIRONMENTAL IMPACT ANALYSIS: ARCHAEOLOGICAL - ECOLOGICAL, ZONE
CHANGE, R-1-20,000 TO R-1-15,000. SAN BERNARDINO COUNTY MUSEUM
ASSOCIATION. SUBMITTED TO HELEN T. GRASS. UNPUBLISHED REPORT ON FILE AT
S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/18/1988
Document No.: 1060194
SAN BERNARDINO COUNTY MUSEUM ASSOCIATION

Cataloged by: WRO-CA-03 on 11/18/1988
Unpublished Report

1973 ENVIRONMENTAL IMPACT SURVEY: RED HILL GREEN TRACT #8884. SAN
BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO JAY DEWEY HARNISH.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 11/18/1988
Document No.: 1060203
ARCHER, MORSE G.

Cataloged by: WRO-CA-03 on 11/18/1988
Chapter in Book/Series

1974 CASA DE RANCHO CUCAMONGA. IN SAN BERNARDINO COUNTY MUSEUM
COMMEMORATIVE EDITION, BY SAN BERNARDINO COUNTY MUSEUM, PP. 21-21.
ALLEN-GREENDALE PUBLISHERS, REDLANDS.

Last Update: 11/18/1988
Document No.: 1060270

Cataloged by: WRO-CA-03 on 11/18/1988
Unpublished Report

SAN BERNARDINO COUNTY MUSEUM ASSOCIATION

1975 ENVIRONMENTAL IMPACT ANALYSIS: ARCHAEOLOGICAL - HISTORICAL RESOURCES, ALTA LOMA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO GRIFFIN DEVELOPMENT CO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060276

Unpublished Report

SAN BERNARDINO COUNTY MUSEUM ASSOCIATION

1975 ENVIRONMENTAL IMPACT ANALYSIS, ARCHAEOLOGICAL VALUES, THE LAND DEVELOPING FIRM OF CROWELL AND LEVANTHAL, TRACT 9157 - CUCAMONGA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO CROWELL AND LEVANTHAL. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060283

Unpublished Report

HARRIS, RUTH D.

1975 ENVIRONMENTAL IMPACT RECONNAISSANCE -- ARCHAEOLOGICAL - HISTORICAL VALUES -- SOUTHWEST CORNER OF 19TH STREET AND HAVEN AVENUE, ALTA LOMA, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO RICHARD LEWIS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/23/1988

Cataloged by: WRO-CA-03 on 11/23/1988

Document No.: 1060286

Unpublished Report

CROWELL, JAMES P.

1975 ARCHAEOLOGICAL - HISTORICAL RESOURCES, APPROXIMATELY 82 ACRES BETWEEN HAVEN AVENUE AND DEER CREEK WASH AND THE PACIFIC ELECTRIC RAILROAD TRACKS AND A PROJECTION EAST OF 19TH STREET IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/23/1988

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Document No.: 1060299

Unpublished Report

HARRIS, RUTH D.

1976 ARCHAEOLOGICAL IMPACT ANALYSIS - CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/28/1988

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Document No.: 1060302

Unpublished Report

SAN BERNARDINO COUNTY MUSEUM ASSOCIATION

1976 ENVIRONMENTAL IMPACT ANALYSIS: ARCHAEOLOGICAL VALUES, FIRM OF LAKEWOOD ENGINEERING, TRACTS 9167 AND 9193 - CUCAMONGA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO LAKEWOOD ENGINEERING. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,

REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060310
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF SIX SITES
LOCATED IN THE ALTA LOMA AREA SAN BERNARDINO COUNTY. SAN BERNARDINO
COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060311
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT; FIFTEEN ACRES,
CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO
A. E. WATWOOD. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024
ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060312
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT FOR TENTATIVE TRACT
9280, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION.
SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B.
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060313
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF SOUTHWEST CORNER
OF NINETEENTH STREET AND ARCHIBALD AVENUE, ALTA LOMA AREA. SAN
BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO MADOLE AND
ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060316
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT, TRACTS 9193 AND
9262, CUCAMONGA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO
MIKE THOMSON. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060317
MARTZ, PATRICIA

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 DESCRIPTION AND EVALUATION OF THE CULTURAL RESOURCES: CUCAMONGA,

DEMENS, DEER AND HILLSIDE CREEK CHANNELS, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO U.S. ARMY CORPS OF ENGINEERS. CONTRACT NO. DACW09-76-C-0011. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/26/1989
Document No.: 1060325
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY TEN ACRES OF LAND AT THE SOUTHEAST CORNER OF ARCHIBALD AVENUE AND BASELINE ROAD, ALTO LOMA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060326
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF A PARCEL LOCATED NORTH OF BANYAN STREET AND EAST OF AMETHYST STREET IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060327
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF A PARCEL LOCATED EAST OF EAST AVENUE AND SOUTH OF HIGHLAND AVENUE IN THE ETIWANDA AREA OF SAN BERNARDINO COUNTY. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060329
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TENTATIVE TRACT 9352, ALTO LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060340
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PARCELS 20, 9 AND 8, ASSESSOR'S MAP BOOK 225, PAGE 18, SAN BERNARDINO COUNTY. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060341
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. 76-10. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060343
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PARCELS 38, 39, 41 AND 42, WEST SIDE OF ARCHIBALD AVENUE IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/30/1988
Document No.: 1060344
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF AREA BETWEEN HIGHLAND AVENUE AND 19TH STREET, WEST OF HAVEN AVENUE, KNOWN AS TENTATIVE TRACT NO. 9366, ALSO TENTATIVE TRACT NO. 9370. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO PACE ENGINEERING. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060345
HARRIS, RUTH D.

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Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY 40 ACS. BOUNDED BY HIGHLAND AVENUE ON THE SOUTH, HERMOSA AVENUE ON THE WEST, HAVEN AVENUE ON THE EAST AND LEMON STREET ON THE NORTH. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TOUPS CORPORATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060346
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. 76-65. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060347
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PARCEL 22, WEST OF ARCHIBALD AVENUE IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO TAIT AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060348
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT 76-80. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060349
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. 75-111, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060350
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. 76-44, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060351
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 11/30/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT 76-33, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060352
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL AND HISTORICAL RESOURCES ASSESSMENT OF PROJECT 76-64, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060353
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJ. NO. 76-64 (REV.) AND 76-76, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/03/1988
Document No.: 1060356
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF VARIOUS PARCELS ALTA LOMA/CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060368
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TWO PARCELS. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO J. P. KAPP AND ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060369
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT AT ARROW - NINTH AND BAKER AND MADRONE, APPROXIMATELY 14 ACRES. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO RULE REALTY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060370
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL ASSESSMENT OF TRACT NUMBER 9440 (76-92) 9441 (76-92A), 9442 (76-92B), ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060373
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF THE NORTHEAST CORNER OF NINETEENTH AND ARCHIBALD, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SANTA ANITA DEVELOPMENT CORPORATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060375

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

HARRIS, RUTH D.

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF 18 ACRES, PORTION OF THE E 1/2 OR THE NW 1/4 OF THE NE 1/4, SEC. 35, T1N R7W, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO GARY GITS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060376
CROWELL, JIM

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL ASSESSMENT OF PARCEL NUMBERS 200-051-06, 07, 51, 12, 20 (SECTION 17); LOT NO. 4 (SECTION 21); AND LOT NO. 1 (SECTION 20), T1N R7W, MOUNT BALDY 7.5' USGS TOPOGRAPHIC MAP. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO FRED SCHULHOF. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060379
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROPOSED GAS TAX PROJECT NO. 3217 AT THE INTERSECTION OF SAN BERNARDINO ROAD AND ARROW HIGHWAY AT NINTH STREET. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO CITY OF UPLAND. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060380
HARRIS, RUTH D.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TRACT NO. 9505 (76-80). SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/1988
Document No.: 1060398
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/02/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF AREA PROPOSED FOR CONSTRUCTION OF FACILITIES FOR FIRE PROTECTION SERVICES AND SHERIFF'S CURATION SERVICES. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY SPECIAL DISTRICTS DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060420
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/05/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TRACT NO. 9569 (76129). SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO

ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM,
2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/07/1988
Document No.: 1060442
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY
12-ACRE SITE LOCATED SOUTH OF EXISTING CASA VOLANTI MOBILE HOME PARK
SOUTH OF FOOTHILL BOULEVARD AND 610 FEET EAST OF BAKER AVENUE IN THE
CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO
BRAD DOWNEY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060443
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY 11
ACRES SOUTH OF CASA VOLANTE MOBILE HOME PARK SOUTH OF FOOTHILL, EAST OF
BAKER AVENUE AND NORTH OF ARROW - CUCAMONGA AREA. SAN BERNARDINO COUNTY
MUSEUM ASSOCIATION. SUBMITTED TO BRAD DOWNEY. UNPUBLISHED REPORT ON FILE
AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060449
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJECT SITE
76-58A IN THE CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION.
SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B.
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060451
HEARN, JOSEPH E.

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Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJECT SITE
76-127 IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION.
SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B.
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060452
HEARN, JOSEPH E.

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Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJECT SITE
76-137 IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION.
SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B.
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060453
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJECT SITE 76-145, ETIWANDA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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Document No.: 1060457
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TENTATIVE TRACTS 9628, 9629, 9630, CUCAMONGA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO MCCUTCHAN AND ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060458
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF LAND INCLUDED IN YOUR PROJECT NUMBER 76-124 IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060460
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TENTATIVE TRACT NOS. 9636, 9637 AND 9638 IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO MADOLE AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060461
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TENTATIVE TRACT NO. 9652 IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO L. D. KING ENGINEERING CO., INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060479
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF LEWIS HOMES PROJECT IN THE ETIWANDA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO RONALD MARTIN AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060495
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF ROAD IMPROVEMENT HO 6451. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY TRANSPORTATION DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060502
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF SOUTHWEST CORNER OF LEMON AND HAVEN (APPROX. 4.5 ACS.) ALTA LOMA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO HONE AND ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/15/1988
Document No.: 1060526
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/15/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT FOR TENTATIVE TRACT NUMBERS 10045, 10046 AND 10047 LOCATED IN THE ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO L. D. KING ENGINEERING CO., INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/15/1988
Document No.: 1060540
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/15/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF TENTATIVE TRACT NO. 10088 ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO L. D. KING ENGINEERING CO., INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/19/1988
Document No.: 1060544
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/19/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROJECT NO. HO 6209, HERMOSA AVENUE AT SOUTHERN PACIFIC RAILWAY, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY TRANSPORTATION DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/19/1988
Document No.: 1060545
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/19/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES EVALUATION OF VINEYARD PARK PROJECT, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY SPECIAL DISTRICTS DEPARTMENT.

UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 12/19/1988
Document No.: 1060552
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/19/1988
Unpublished Report

1977 HISTORICAL - ARCHAEOLOGICAL RESOURCES ASSESSMENT OF APPROXIMATELY
ONE-HALF ACRE AT 8433 BAKER AVENUE IN CUCAMONGA. SAN BERNARDINO COUNTY
MUSEUM ASSOCIATION. SUBMITTED TO GEORGE LUTTERMAN. UNPUBLISHED REPORT ON
FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/19/1988
Document No.: 1060563
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/19/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF 52.94 ACRE
PORTION OF THE KING RANCH IN THE ALTA LOMA, CUCAMONGA AREA. SAN
BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 12/19/1988
Document No.: 1060606
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/19/1988
Unpublished Report

1978 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF A PORTION OF LOT
1, CUCAMONGA VINEYARD TRACT SUBDIVISION "C"; ALTA LOMA AREA OF RANCHO
CUCAMONGA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO
ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM,
2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/20/1988
Document No.: 1060611
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/20/1988
Unpublished Report

1978 HISTORICAL - ARCHAEOLOGICAL - PALEONTOLOGICAL RESOURCES ASSESSMENT
OF ZONE 1, NINTH STREET STORM DRAIN; CITY OF UPLAND. SAN BERNARDINO
COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY FLOOD
CONTROL DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024
ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/20/1988
Document No.: 1060640
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/20/1988
Unpublished Report

1978 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT - ALTA LOMA AREA.
SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED
ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060642
WEAVER, RICHARD A.

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1977 ARCHAEOLOGICAL IMPACT EVALUATION: TEST EXCAVATION AT BASE LINE - CARNELIAN STREET TO VINEYARD AVENUE, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO SAN BERNARDINO COUNTY TRANSPORTATION DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060643
LIPP, DONALD

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ARCHAEOLOGICAL IMPACT EVALUATION: TEST EXCAVATIONS AT SBR-902, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO ONTARIO SAVINGS AND LOAN ASSOCIATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060648
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF 78-12, ASSESSOR'S PARCEL NUMBERS: 201-101-17, 201-101-25, ALTA LOMA AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060650
BALDWIN, JAMES

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE PROPOSED TRANSMISSION LINE ALONG HANLEY AVENUE FROM SUMMIT AVENUE TO 25TH STREET. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO CUCAMONGA COUNTY WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060651
BALDWIN, JAMES

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE PROPOSED TRANSMISSION LINE FROM THE FILTRATION PLANT AT HANLEY AVENUE AND 25TH STREET TO THE DAY CANYON RANGER STATION. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO CUCAMONGA COUNTY WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060652
BALDWIN, JAMES

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE PROPOSED TRANSMISSION LINE ALONG SUMMIT AVENUE FROM HANLEY AVENUE TO ETIWANDA AVENUE. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO

CUCAMONGA COUNTY WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060653
BALDWIN, JAMES

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF FILTRATION PLANT 4-C, CUCAMONGA WATER DISTRICT SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO CUCAMONGA COUNTY WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060654
BALDWIN, JAMES

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF RESERVOIR SITE 3-C, CUCAMONGA WATER DISTRICT, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO CUCAMONGA COUNTY WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/22/1988
Document No.: 1060675
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/22/1988
Unpublished Report

1978 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF LOT 10 OF BLOCK 10, SAN ANTONIO SUBDIVISION, TENTATIVE PARCEL MAP NO. 4663. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ALL CITIES ENGINEERING, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/27/1988
Document No.: 1060702
ARCHAEOLOGICAL ASSOCIATES

Cataloged by: WRO-CA-03 on 12/27/1988
Unpublished Report

1978 ARCHAEOLOGICAL SURVEY REPORT: ULTRASYSTEMS PROJECT #4426. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO ULTRASYSTEMS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/27/1988
Document No.: 1060806
WILMOTH, STAN

Cataloged by: WRO-CA-03 on 12/27/1988
Unpublished Report

1979 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF BOTH SIDES OF SIXTEENTH STREET (BASELINE) IN THE CITY OF UPLAND, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO CITY OF UPLAND. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/12/1989
Document No.: 1060877

Cataloged by: WRO-CA-03 on 01/12/1989
Unpublished Report

SIMPSON, RUTH D.

1979 CULTURAL RESOURCES ASSESSMENT: VINEYARD AVENUE FROM FOURTH STREET NORTH TO ARROW HIGHWAY. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO CITY OF ONTARIO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/16/1989 Cataloged by: WRO-CA-03 on 01/16/1989
Document No.: 1060902 Unpublished Report
ARCHAEOLOGICAL RESOURCE MANAGEMENT CORPORATION

1980 ARCHAEOLOGICAL ASSESSMENT OF RANCHO CUCAMONGA BUSINESS PARK EIR. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORPORATION. SUBMITTED TO PHILLIPS, BRANDT & REDDICK CORPORATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/05/1989 Cataloged by: WRO-CA-03 on 01/17/1989
Document No.: 1061180 Unpublished Report
SMITH, GERALD A. AND MICHAEL K. LERCH

1981 CULTURAL RESOURCES ASSESSMENT OF THE ONTARIO INDUSTRIAL PARK, SAN BERNARDINO COUNTY, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO THE SWA GROUP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 03/20/1989 Cataloged by: WRO-CA-03 on 03/20/1989
Document No.: 1061248 Unpublished Report
LERCH, MICHAEL K.

1982 CULTURAL RESOURCES ASSESSMENT OF A PROPOSED 5.0 MG RESERVOIR SITE, SAN ANTONIO WATER COMPANY, UPLAND, SAN BERNARDINO COUNTY, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/03/1989 Cataloged by: WRO-CA-03 on 04/03/1989
Document No.: 1061262 Unpublished Report
LERCH, MICHAEL K.

1982 CULTURAL RESOURCES ASSESSMENT OF THE NORTH TOWN STREET IMPROVEMENTS: PHASE III, AND NEIGHBORHOOD CENTER EXPANSION PROJECTS, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO CITY OF RANCHO CUCAMONGA. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/03/1989 Cataloged by: WRO-CA-03 on 04/03/1989
Document No.: 1061299 Unpublished Report
SCIENTIFIC RESOURCE SURVEYS, INC.

1982 ARCHAEOLOGICAL, PALEONTOLOGICAL, HISTORICAL REPORT ON THE WILLIAM LYON COMPANY "VICTORIA COMMUNITY" TT 11934, A 192.8 ACRE PARCEL LOCATED IN THE CITY OF CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. SCIENTIFIC RESOURCE SURVEYS, INC. SUBMITTED TO WILLIAM LYON COMPANY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA

92374.

Last Update: 04/14/1989
Document No.: 1061305
LERCH, MICHAEL K.

Cataloged by: WRO-CA-03 on 04/14/1989
Unpublished Report

1982 CULTURAL RESOURCES ASSESSMENT OF TENTATIVE TRACT #12237 AND PARCEL #7370, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO WOODLAND PACIFIC DEVELOPMENT, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/14/1989
Document No.: 1061388
COTTRELL, MARIE G.

Cataloged by: WRO-CA-03 on 04/14/1989
Unpublished Report

1983 ARCHAEOLOGICAL RESOURCES ASSESSMENT CONDUCTED FOR THE DAY/ETIWANDA/SAN SEVAINE CREEKS DRAINAGE PLAN AND THE DAY CREEK CHANNEL DEBRIS BASIN. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORP. SUBMITTED TO PLANNING NETWORK. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/26/1989
Document No.: 1061407
ANICIC, JR., JOHN CHARLES

Cataloged by: WRO-CA-03 on 04/26/1989
Unpublished Report

1983 HISTORICAL BRIEF ON GRAPELAND, SIERRA HEIGHTS DEVELOPMENT. FONTANA HISTORICAL SOCIETY. SUBMITTED TO FONTANA PLANNING DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/01/1989
Document No.: 1061459
SCIENTIFIC RESOURCES SURVEYS, INC.

Cataloged by: WRO-CA-03 on 05/01/1989
Unpublished Report

1984 CULTURAL AND PALEONTOLOGICAL RESOURCE SURVEY REPORT FOR THE HUNT CLUB, NEAR LYTLE CREEK, SAN BERNARDINO COUNTY, CALIFORNIA. SCIENTIFIC RESOURCES SURVEYS, INC. SUBMITTED TO THE PLANNING CENTER. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/12/1991
Document No.: 1061473
BREECE, WILLIAM H.

Cataloged by: WRO-CA-03 on 05/12/1989
Unpublished Report

1984 THE VINYARDS SURVEY. WILLIAM H. BREECE. SUBMITTED TO UNKNOWN. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/12/1989
Document No.: 1061501
MASON, ROGER D.

Cataloged by: WRO-CA-03 on 05/12/1989
Unpublished Report

1985 CULTURAL RESOURCE SURVEY REPORT FOR THE ETIWANDA PIPELINE AND POWER

PLANT EIR. SCIENTIFIC RESOURCES SURVEYS, INC. SUBMITTED TO METROPOLITAN WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/26/1989
Document No.: 1061506
SWOPE, KAREN K. AND MEG MCDONALD

Cataloged by: WRO-CA-03 on 05/26/1989
Unpublished Report

1985 ENVIRONMENTAL IMPACT EVALUATION: ARCHAEOLOGICAL ASSESSMENT OF TENTATIVE TRACT 13000, CITY OF FONTANA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO WEST END VENTURE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/02/1989
Document No.: 1061582
LERCH, MICHAEL K.

Cataloged by: WRO-CA-03 on 06/02/1989
Unpublished Report

1986 CLASS III CULTURAL RESOURCES INVENTORY: SAN SEVAINE CREEK WATER PROJECT, SAN BERNARDINO COUNTY, CALIFORNIA. LERCH AND ASSOCIATES. SUBMITTED TO ENGINEERING-SCIENCE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/12/1989
Document No.: 1061591
LERCH, MICHAEL K.

Cataloged by: WRO-CA-03 on 06/12/1989
Unpublished Report

1986 CLASS III CULTURAL RESOURCES INVENTORY: DAY CREEK WATER PROJECT, SAN BERNARDINO COUNTY, CALIFORNIA. LERCH AND ASSOCIATES. SUBMITTED TO ENGINEERING-SCIENCE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/12/1989
Document No.: 1061601
HATHEWAY, ROGER G. AND ROGER D. MASON

Cataloged by: WRO-CA-03 on 06/12/1989
Unpublished Report

1986 HISTORIC PROPERTY SURVEY REPORT: EUCLID AVENUE IMPROVEMENT PROJECT, CITY OF UPLAND, CALIFORNIA, PROJECT 3645. SCIENTIFIC RESOURCE SURVEYS. SUBMITTED TO THE PLANNING CENTER. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/12/1989
Document No.: 1061643
BOUSCAREN, STEPHEN J. AND VICTOR C. DE MUNCK

Cataloged by: WRO-CA-03 on 06/12/1989
Unpublished Report

1987 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE COUSSOULIS DEVELOPMENT PROJECT NEAR ETIWANDA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL AND ETHNOGRAPHIC FIELD ASSOCIATES. SUBMITTED TO W.R. HENDRIX ENGINEERING. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/23/1989
Document No.: 1061655
LERCH, MICHAEL K.

Cataloged by: WRO-CA-03 on 06/23/1989
Unpublished Report

1987 CULTURAL RESOURCE FIELD RECONNAISSANCE: CARYN PROJECT, WEST VALLEY FOOTHILLS COMMUNITY PLAN. MICHAEL K. LERCH. SUBMITTED TO SAN BERNARDINO COUNTY PLANNING DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/23/1989 Cataloged by: WRO-CA-03 on 06/23/1989
Document No.: 1061660 Unpublished Report
GROSS, LORRAINE S., KEVIN J. PETER, AND WILLIAM B. GILMOUR

1987 CULTURAL AND PALEONTOLOGICAL RESOURCE INVESTIGATIONS OF THE LAKES AT SAN ANTONIO PROJECT, CITY OF UPLAND, SAN BERNARDINO COUNTY, CALIFORNIA. SCIENTIFIC RESOURCE SURVEYS. SUBMITTED TO DOUGLAS WOOD AND ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/23/1989 Cataloged by: WRO-CA-03 on 06/23/1989
Document No.: 1061705 Unpublished Report
BOUSCAREN, STEPHEN J. AND VICTOR C. DE MUNCK

1987 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE COUSSOULIS DEVELOPMENT PROJECT NEAR ETIWANDA, SAN BERNARDINO COUNTY, CALIFORNIA: ADDENDUM. ARCHAEOLOGICAL AND ETHNOGRAPHIC FIELD ASSOCIATES. SUBMITTED TO MICHAEL BRANDMAN ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/28/1989 Cataloged by: WRO-CA-03 on 06/28/1989
Document No.: 1061746 Unpublished Report
SWANSON, MARK T.

1987 CULTURAL RESOURCES SURVEY OF A PROPOSED 120-ACRE ADULT PRE-TRIAL DETENTION FACILITY, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. RESEARCH ASSOCIATES. SUBMITTED TO CONVERSE ENVIRONMENTAL CONSULTANTS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/28/1989 Cataloged by: WRO-CA-03 on 06/28/1989
Document No.: 1061818 Unpublished Report
DE MUNCK, VICTOR C.

1988 ENVIRONMENTAL IMPACT EVALUATION: A CULTURAL ASSESSMENT OF A 20 ACRE TRACT OF LAND IN THE VICINITY OF FONTANA, SAN BERNARDINO COUNTY. RESEARCH ASSOCIATES. SUBMITTED TO DAVID S. RUCH. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/30/1989 Cataloged by: WRO-CA-03 on 06/30/1989
Document No.: 1061829 Unpublished Report
HATHEWAY, ROGER G. AND JEANETTE A. MCKENNA

1988 AN HISTORICAL AND ARCHAEOLOGICAL INVESTIGATION OF THE ETIWANDA ROCK CAIRNS, SAN BERNARDINO, CALIFORNIA, CA-SBR-4946-H. HATHEWAY & MCKENNA. SUBMITTED TO SAN BERNARDINO COUNTY LAND MANAGEMENT DEPARTMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/30/1989
Document No.: 1061862
BROWN, ROBERT S.

Cataloged by: WRO-CA-03 on 06/30/1989
Unpublished Report

1989 ARCHAEOLOGICAL RECONNAISSANCE AND RECORDS SEARCH CONCERNING A 108-ACRE PROPERTY IN RANCHO CUCAMONGA, SAN BERNARDINO: TENTATIVE TRACT 12376. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORPORATION. SUBMITTED TO SAHAMA INVESTMENTS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/03/1989
Document No.: 1061868
PADON, BETH, JOHN ELLIOTT, AND STEVE DIES

Cataloged by: WRO-CA-03 on 07/03/1989
Unpublished Report

1989 NORTH ETIWANDA SPECIFIC PLAN: CULTURAL RESOURCE ASSESSMENT. LSA ASSOCIATES, INC. SUBMITTED TO LAND/PLAN/DESIGN GROUP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/03/1989
Document No.: 1061894
BOUSCAREN, STEPHEN J. AND MARK T. SWANSON

Cataloged by: WRO-CA-03 on 07/03/1989
Unpublished Report

1989 CULTURAL RESOURCES SURVEY OF THE 27 ACRE PROPOSED CHINO BASIN MUNICIPAL WATER DISTRICT (CBMWD) REGIONAL PLAN NO. 4 IN THE CITY OF CUCAMONGA, CALIFORNIA. RESEARCH ASSOCIATES. SUBMITTED TO HIGMAN DOEHLE, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/24/1989
Document No.: 1061901
JENKINS, RICHARD C.

Cataloged by: WRO-CA-03 on 07/24/1989
Unpublished Report

1987 VEGETATION AND WATERSHED MANAGEMENT, ARCHEOLOGICAL REVIEW, ALTA LOMA VMP PROJECT. RICHARD C. JENKINS. SUBMITTED TO CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/24/1989
Document No.: 1061924
HATHEWAY, ROGER G. AND JEANETTE A. MCKENNA

Cataloged by: WRO-CA-03 on 08/24/1989
Unpublished Report

1989 HISTORICAL, ARCHITECTURAL, AND ARCHAEOLOGICAL RESOURCES REPORT FOR THE TAYS RESIDENCE/LIFE BIBLE FELLOWSHIP PROPERTY. HATHEWAY & MCKENNA. SUBMITTED TO LIFE BIBLE FELLOWSHIP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/05/1989
Document No.: 1062033
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 10/05/1989
Unpublished Report

1990 A PHASE I ARCHAEOLOGICAL INVESTIGATION OF THE PROPOSED LEWIS HOMES' PROJECT AREA, FONTANA, SAN BERNARDINO COUNTY, CALIFORNIA. MCKENNA ET AL. SUBMITTED TO LEWIS HOMES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/04/1990
Document No.: 1062039
DILLON, BRIAN D.

Cataloged by: WRO-CA-03 on 10/04/1990
Unpublished Report

1989 CULTURAL RESOURCE INVESTIGATION: HUNTER'S RIDGE PROJECT, CITY OF FONTANA, SAN BERNARDINO COUNTY, CALIFORNIA. SCIENTIFIC RESOURCE SURVEYS. SUBMITTED TO FIRST CITY PROPERTIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/12/1991
Document No.: 1062041
HAMMOND, STEPHEN R.

Cataloged by: WRO-CA-03 on 10/04/1990
Unpublished Report

1989 NEGATIVE ARCHAEOLOGICAL SURVEY REPORT: ROUTE 15, 30, POST MILE 7.6/9.3, 11.8/13.1. STEPHEN R. HAMMOND. SUBMITTED TO CALIFORNIA DEPARTMENT OF TRANSPORTATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/04/1990
Document No.: 1062043
SUTTON, PAULA A.

Cataloged by: WRO-CA-03 on 10/04/1990
Unpublished Report

1989 ARCHAEOLOGICAL SURVEY REPORT FOR THE PROPOSED FOOTHILL FREEWAY, LOS ANGELES AND SAN BERNARDINO COUNTIES, CALIFORNIA. PAULA A. SUTTON. SUBMITTED TO CALIFORNIA DEPARTMENT OF TRANSPORTATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/04/1990
Document No.: 1062059
INFOTEC RESEARCH

Cataloged by: WRO-CA-03 on 10/04/1990
Unpublished Report

1990 COMPENDIUM OF RESULTS OF OBSIDIAN STUDIES FOR STUDY AREA SITES: APPENDIX TO PREHISTORIC SITES IN THE PRADO BASIN, CALIFORNIA: REGIONAL CONTEXT AND SIGNIFICANCE EVALUATION. INFOTEC. SUBMITTED TO CORPS OF ARMY ENGINEERS, LOS ANGELES. CONTRACT NO. DACW09-86-D-0034. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/09/1990
Document No.: 1062070
RECTOR, CAROL

Cataloged by: WRO-CA-03 on 10/09/1990
Unpublished Report

1990 REPORT ON TRIP TO RAINS HOUSE. CAROL RECTOR. SUBMITTED TO SAN BERNARDINO COUNTY MUSEUM. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/09/1990
Document No.: 1062086
DEL CHARIO, KATHLEEN C.

Cataloged by: WRO-CA-03 on 10/09/1990
Unpublished Report

1990 AN ARCHAEOLOGICAL ASSESSMENT OF THE SYCAMORE VILLAGE PROJECT SITE, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORP. SUBMITTED TO PLANNING NETWORK. UNPUBLISHED REPORT ON

FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/09/1990
Document No.: 1062090
SWANSON, MARK T.

Cataloged by: WRO-CA-03 on 10/09/1990
Unpublished Report

1990 ADDENDUM TO CULTURAL RESOURCES SURVEY OF THE 27 ACRE PROPOSED CHINO BASIN MUNICIPAL WATER DISTRICT (CBMWD) REGIONAL PLANT NO. 4, IN THE CITY OF CUCAMONGA, CALIFORNIA. RESEARCH ASSOCIATES. SUBMITTED TO CHINO BASIN MUNICIPAL WATER DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/09/1990
Document No.: 1062101
VAN WORMER, STEPHEN R.

Cataloged by: WRO-CA-03 on 10/09/1990
Unpublished Report

1990 AN HISTORICAL ASSESSMENT OF THE SYCAMORE VILLAGE PROJECT SITE, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORP. SUBMITTED TO PLANNING NETWORK. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/09/1990
Document No.: 1062175
WHITE, DAVID R.M.

Cataloged by: WRO-CA-03 on 10/09/1990
Unpublished Report

1988 CULTURAL RESOURCES INVENTORY FOR THE PROPOSED ROCHESTER SUBSTATION, SAN BERNARDINO COUNTY, CALIFORNIA. DAVID WHITE. SUBMITTED TO SOUTHERN CALIFORNIA EDISON. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/15/1990
Document No.: 1062188
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 11/14/1990
Unpublished Report

1990 A PHASE I ARCHAEOLOGICAL INVESTIGATION OF THE PROPOSED AHMANSON/WATT TRACTS (154 ACRES), ETIWANDA/RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. MCKENNA ET AL. SUBMITTED TO AHMANSON DEVELOPMENTS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/21/1990
Document No.: 1062240
DE BARROS, PHILIP

Cataloged by: WRO-CA-03 on 11/21/1990
Unpublished Report

1990 HUNTER'S RIDGE: FIRST CITY PROPERTIES, HISTORIC FEATURES PHOTOGRAPHIC DOCUMENTATION. CHAMBERS GROUP. SUBMITTED TO FIRST CITY PROPERTIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/10/1991
Document No.: 1062241
ALEXANDROWICZ, J. STEPHEN AND PETER E. CARR

Cataloged by: WRO-CA-03 on 10/10/1991
Unpublished Report

1991 INTERIM REPORT: CULTURAL RESOURCE MANAGEMENT INVESTIGATIONS OF THE

HUNTERS RIDGE COMMUNITY DEVELOPMENT, FONTANA CALIFORNIA. CHAMBERS GROUP. SUBMITTED TO FIRST CITY PROPERTIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/1993
Document No.: 1062266
DONNELLY, CORDY

Cataloged by: WRO-CA-03 on 10/10/1991
Unpublished Report

1991 REVISION AND DISCOVERY IN A MILLING STONE HORIZON CONTEXT. CORDY DONNELLY. SUBMITTED TO POMONA COLLEGE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/24/1991
Document No.: 1062286
CLEVENGER, JOYCE M.

Cataloged by: WRO-CA-03 on 10/24/1991
Unpublished Report

1988 CULTURAL RESOURCE SURVEY OF THE ETIWANDA PIPELINE AND POWER PLANT AND ALTERNATIVES, SAN BERNARDINO COUNTY, CALIFORNIA. WESTEC SERVICES. SUBMITTED TO METROPOLITAN WATER DISTRICT OF SO. CALIF. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/29/1991
Document No.: 1062289
WEISBORD, JILL

Cataloged by: WRO-CA-03 on 10/29/1991
Unpublished Report

1990 COUNTY OF SAN BERNARDINO, REGIONAL MEDICAL CENTER RELOCATION PROJECT EIR. JILL WEISBORD. SUBMITTED TO CONVERSE ENVIRONMENTAL WEST. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/29/1991
Document No.: 1062290
HATHEWAY, ROGER G. AND JOHN F. ROMANI

Cataloged by: WRO-CA-03 on 10/29/1991
Unpublished Report

1991 PRELIMINARY HISTORIC PROPERTY SURVEY REPORT FOR THE PROPOSED WIDENING OF FOOTHILL BOULEVARD BETWEEN GROVE AVENUE AND LION STREET, IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY. HATHEWAY AND ASSOCIATES. SUBMITTED TO ESA. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/1993
Document No.: 1062293
SALLS, ROY A.

Cataloged by: WRO-CA-03 on 10/29/1991
Journal Article

1985 THE SCRAPER PLANE: A FUNCTIONAL INTERPRETATION. JOURNAL OF FIELD ARCHAEOLOGY, 12(1):99-106.

Last Update: 10/29/1991
Document No.: 1062294
SALLS, ROY A.

Cataloged by: WRO-CA-03 on 10/29/1991
Journal Article

1990 CONCERNING WILLIAM FOLAN'S SCRAPER PLANES. JOURNAL OF FIELD ARCHAEOLOGY, 17(2):245-245.

Last Update: 10/29/1991
Document No.: 1062316
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 10/29/1991
Unpublished Report

1991 CULTURAL RESOURCES INVESTIGATIONS OF THE ETIWANDA NORTH SPECIFIC PLAN EIR, CITY OF ETIWANDA, SAN BERNARDINO COUNTY. MCKENNA ET AL. SUBMITTED TO ENVICOM CORP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/02/1991
Document No.: 1062412
DEL CHARIO, KATHLEEN C. AND CAROL R. DEMCAK

Cataloged by: WRO-CA-03 on 10/30/1991
Unpublished Report

1991 A CULTURAL RESOURCE ASSESSMENT OF THE ONTARIO MILLS PROJECT SITE, CITY OF ONTARIO, SAN BERNARDINO COUNTY. ARCHAEOLOGICAL RESOURCE MANAGEMENT CORP. SUBMITTED TO PLANNING NETWORK. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/20/1992
Document No.: 1062413
SUTTON, PAULA A.

Cataloged by: WRO-CA-03 on 05/20/1992
Unpublished Report

1991 FIRST ADDENDUM ARCHAEOLOGICAL SURVEY REPORT FOR THE CONSTRUCTION OF THE INTERSTATE 15/STATE ROUTE 30 INTERCHANGE IN THE CITIES OF RANCH CUCAMONGA AND FONTANA IN SAN BERNARDINO COUNTY, CA. PAULA SUTTON. SUBMITTED TO CALIFORNIA DEPARTMENT OF TRANSPORTATION - SAN BERNARDINO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/20/1992
Document No.: 1062434
DEL CHARIO, KATHLEEN C.

Cataloged by: WRO-CA-03 on 05/20/1992
Unpublished Report

1991 ADDENDUM TO A CULTURAL RESOURCE ASSESSMENT OF THE ONTARIO MILLS PROJECT SITE, CITY OF ONTARIO, SAN BERNARDINO COUNTY. ARCHAEOLOGICAL RESOURCES MANAGEMENT CORP. SUBMITTED TO PLANNING NETWORK. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/20/1992
Document No.: 1062444
MCALLISTER, BERNICE LYONS

Cataloged by: WRO-CA-03 on 05/20/1992
Unpublished Report

1991 PROVENIENCE LOG FOR THE SBCM HA1 ASSEMBLAGE. CHAFFEY COLLEGE, SOCIAL SCIENCE DIVISION. SUBMITTED TO SAN BERNARDINO COUNTY MUSEUM. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/20/1992
Document No.: 1062501
HOGAN, MICHAEL

Cataloged by: WRO-CA-03 on 05/20/1992
Unpublished Report

1992 ARCHAEOLOGICAL MONITORING REPORT: METROPOLITAN WATER DISTRICT

ETIWANDA PIPELINE, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. UNIV. OF CALIFORNIA, RIVERSIDE, ARCHAEOLOGICAL RESEARCH UNIT. SUBMITTED TO ADVANCO CONSTRUCTORS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/22/1992
Document No.: 1062527
HAMMOND, STEPHEN R.

Cataloged by: WRO-CA-03 on 05/22/1992
Unpublished Report

1989 HISTORIC PROPERTY SURVEY REPORT FOR THE PROPOSED FOOTHILL FREEWAY. STEPHEN HAMMOND. SUBMITTED TO CALIFORNIA DEPARTMENT OF TRANSPORTATION - SAN BERNARDINO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/22/1992
Document No.: 1062530
GALLUP, AARON A., BONNIE W. PARKS, DENISE O'CONNOR, AND STEPHEN D. MIKESSELL

Cataloged by: WRO-CA-03 on 05/22/1992
Unpublished Report

1989 HISTORICAL ARCHITECTURAL SURVEY REPORT AND HISTORIC RESOURCE EVALUATION REPORT FOR A PROPOSED HIGHWAY ON NEW ALIGNMENT. HARVEY SAWYER. SUBMITTED TO CALIFORNIA DEPARTMENT OF TRANSPORTATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/22/1992
Document No.: 1062537
SALLS, ROY A.

Cataloged by: WRO-CA-03 on 05/22/1992
Chapter in Book/Series

1988 OBSIDIAN DATING OF THE LIBERTY GROVE SITE WITH IMPLICATIONS FOR SASSON AND CHAFFEY HILLSIDE ARCHAEOLOGICAL SITES. IN OBSIDIAN DATES IV: A COMPENDIUM OF THE OBSIDIAN HYDRATION DETERMINATIONS MADE AT THE UCLA OBSIDIAN HYDRATION LABORATORY, BY CLEMENT W. MEIGHAN AND JANET L. SCALISE, PP. 42-44. INSTITUTE OF ARCHAEOLOGY, UNIV. OF CALIFORNIA, LOS ANGELES, LOS ANGELES, CA.

Last Update: 06/17/1992
Document No.: 1062539
HARRIS, RUTH O.

Cataloged by: WRO-CA-03 on 05/22/1992
Unpublished Report

1976 ARCHAEOLOGICAL-HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY TEN ACRES OF LAND AT THE SOUTHEAST CORNER OF ARCHIBALD AVENUE AND BASELINE ROAD, ALTA LOMA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ASSOCIATED ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/22/1992
Document No.: 1062547
DE BARROS, PHILIP

Cataloged by: WRO-CA-03 on 05/22/1992
Unpublished Report

1991 DRAFT ADDENDUM TO INTERIM REPORT: CULTURAL RESOURCE MANAGEMENT INVESTIGATIONS OF THE HUNTER'S RIDGE COMMUNITY DEVELOPMENT, FONTANA, CALIFORNIA. CHAMBERS GROUP. SUBMITTED TO FIRST CITY PROPERTIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/22/1992
Document No.: 1062557
HARRIS, RUTH O.

Cataloged by: WRO-CA-03 on 05/22/1992
Unpublished Report

1976 ARCHAEOLOGICAL-HISTORICAL RESOURCES ASSESSMENT FOR TRACT 9302 AND TRACT 9305, ALTA LOMA, CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO MAXWELL-BROWN-MULLINS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/26/1992
Document No.: 1062561
SALLS, ROY

Cataloged by: WRO-CA-03 on 05/26/1992
Dissertation/Thesis

1983 THE LIBERTY GROVE SITE: ARCHAEOLOGICAL INTERPRETATIONS OF A LATE MILLINGSTONE SITE ON THE CUCAMONGA PLAIN. (NO ENTRY IN DISSERTATION/THESIS TABLE.)

Last Update: 12/22/1992
Document No.: 1062589
DE BARROS, PHILIP AND CARMEN WEBER

Cataloged by: WRO-CA-03 on 12/22/1992
Unpublished Report

1992 ADDENDUM TWO TO INTERIM REPORT: CULTURAL RESOURCE MANAGEMENT INVESTIGATIONS OF THE HUNTER'S RIDGE COMMUNITY DEVELOPMENT, FONTANA, CALIFORNIA. CHAMBERS GROUP. SUBMITTED TO FIRST CITY PROPERTIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/29/1992
Document No.: 1062621

Cataloged by: WRO-CA-03 on 12/29/1992
Unpublished Report

ALEXANDROWICZ, J. STEVEN, ANNE Q. DUFFIELD-STOLL, JEANETTE A. MCKENNA, SUSAN R. ALEXANDROWICZ, ARTHUR A. KUHNER, AND ERIC SCOTT

1992 CULTURAL AND PALEONTOLOGICAL RESOURCES INVESTIGATIONS WITHIN THE NORTH FONTANA INFRASTRUCTURE AREA, CITY OF FONTANA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL CONSULTING SERVICES. SUBMITTED TO CITY OF FONTANA. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/1993
Document No.: 1062632

Cataloged by: WRO-CA-03 on 12/30/1992
Unpublished Report

ALEXANDROWICZ, J. STEPHEN, SUSAN R. ALEXANDROWICZ, AND ARTHUR A. KUHNER

1992 A CULTURAL RESOURCES INVESTIGATION FOR THE PROPOSED CONSTRUCTION SITE AT THE GUENGERICH PROPERTY, TENTATIVE TRACT NO. 15351, 643 EAST 24TH STRET, COUNTY OF SAN BERNARDINO, CALIFORNIA. ARCHAEOLOGICAL CONSULTING SERVICES. SUBMITTED TO LESLIE AND DOROTHY GUENGERICH. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/1993
Document No.: 1062660
SWOPE, KAREN K.

Cataloged by: WRO-CA-03 on 01/04/1993
Unpublished Report

1992 ARCHAEOLOGICAL INVESTIGATIONS ON APPROXIMATELY 240 ACRES, MINING AND

RECLAMATION, KAISER MILL SITE, FONTANA, SAN BERNARDINO COUNTY, CUP
W130-97, AS SHOWN ON THE GUASTI 7.5' QUADRANGLE. RESEARCH ASSOCIATES.
SUBMITTED TO FOURTH STREET ROCK CRUSHER. UNPUBLISHED REPORT ON FILE AT
S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/1993 Cataloged by: WRO-CA-03 on 01/07/1993
Document No.: 1062754 Unpublished Report
ALEXANDROWICZ, J. STEPHEN AND SUSAN R., AND ARTHUR A. KUHNER

1993 A CABIN BUNGALOW ON THE HILL: HISTORIC PRESERVATION IN SAN ANTONIO
HEIGHTS, COUNTY OF SAN BERNARDINO, CA. ARCHAEOLOGICAL CONSULTING
SERVICES. SUBMITTED TO LES & DOROTHY GUENGERICH. UNPUBLISHED REPORT ON
FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/23/1993 Cataloged by: WRO-CA-03 on 09/23/1993
Document No.: 1062763 Unpublished Report
ALEXANDROWICZ, J. STEPHEN, ANNE DUFFIELD-STOLL, AND SUSAN R. ALEXANDROWICZ

1993 URBAN HISTORIC ARCHAEOLOGICAL AND ARCHITECTURAL INVESTIGATIONS AT
FOOTHILL BLVD. & VINEYARD AVE., CITY OF RANCHO CUCAMONGA, COUNTY OF SAN
BERNARDINO, CA. ARCHAEOLOGICAL CONSULTING SERVICES. SUBMITTED TO CITY
OF RANCHO CUCAMONGA. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024
ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/19/1993 Cataloged by: WRO-CA-03 on 10/19/1993
Document No.: 1062795 Unpublished Report
HAMPSON, R. PAUL, JAMES J. SCHMIDT, AND JUNE A. SCHMIDT

1991 CULTURAL RESOURCE INVESTIGATION: CAJON PIPELINE PROJECT. GREENWOOD
& ASSOCIATES. SUBMITTED TO EIP ASSOCIATES. UNPUBLISHED REPORT ON FILE AT
S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/29/1993 Cataloged by: WRO-CA-03 on 12/29/1993
Document No.: 1062796 Unpublished Report
MCKENNA, JEANETTE A.

1993 CULTURAL RESOURCES INVESTIGATIONS, SITE INVENTORY AND EVALUATIONS,
THE CAJON PIPELINE CORRIDOR, LOS ANGELES AND SAN BERNARDINO COUNTIES.
MCKENNA ET AL. SUBMITTED TO EIP ASSOCIATES. UNPUBLISHED REPORT ON FILE
AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/29/1993 Cataloged by: WRO-CA-03 on 12/29/1993
Document No.: 1062823 Unpublished Report
HALL, M.C.

1993 ARCHAEOLOGICAL MONITORING OF NEW CONSTRUCTION AT THE TAYS
RESIDENCE/LIFE BIBLE FELLOWSHIP PROPERTY. ARU. SUBMITTED TO LIFE BIBLE
FELLOWSHIP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

Last Update: 01/19/1994 Cataloged by: WRO-CA-03 on 01/19/1994
Document No.: 1062851 Unpublished Report
LANDIS, DANIEL G.

1993 A CULTURAL RESOURCES SURVEY FOR THE CHINO BASIN GROUNDWATER STORAGE PROGRAM, SAN BERNARDINO COUNTY, CA. GREENWOOD & ASSOCIATES. SUBMITTED TO MWD. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/14/1994
Document No.: 1062863
WLODARSKI, ROBERT J.

Cataloged by: WRO-CA-03 on 04/14/1994
Unpublished Report

1993 PROVIDE HIGH OCCUPANCY VEHICLE (HOV) LANES ON I-10 BETWEEN MILLS AND I-15. HEART. SUBMITTED TO CAL TRANS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/05/1994
Document No.: 1062916
HOGAN, MICHAEL AND B. TOM TANG

Cataloged by: WRO-CA-03 on 07/05/1994
Unpublished Report

1993 CULTURAL RESOURCE ASSESSMENT CAMP RADFORD LOCATED IN THE SAN BERNARDINO MOUNTAINS, SAN BERNARDINO NATIONAL FOREST, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT. SUBMITTED TO CITY OF LOS ANGELES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/11/1994
Document No.: 1062917
WHITE, LAURA S.

Cataloged by: WRO-CA-03 on 10/11/1994
Unpublished Report

1994 HISTORIC PROPERTY SURVEY REPORT FOR THE PROPOSED METROLINK PROJECT IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO WILDAN ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/11/1994
Document No.: 1062940
ARCHAEOLOGICAL ASSOCIATES

Cataloged by: WRO-CA-03 on 10/11/1994
Unpublished Report

1993 HISTORICAL PROPERTY SURVEY REPORT FOR THE PROPOSED WIDENING OF FOOTHILL BLVD., BETWEEN GROVE AVE AND LION ST., IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CALIFORNIA. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO ENVIRONMENTAL SCIENCE ASSOCIATES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/1994
Document No.: 1062979
TAYLOR, THOMAS T.

Cataloged by: WRO-CA-03 on 10/13/1994
Unpublished Report

1993 ARCHAEOLOGICAL RECONNAISSANCE SURVEY REPORT MIDDLE LUGO-MIRA LOMA 500KV T/L RIGHT-OF-WAY BETWEEN CONCOURS AND JURUPA AVE., ONTARIO, CA. T. TAYLOR. SUBMITTED TO SCE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/08/1995

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Document No.: 1063000
CHACE, PAUL G. AND LAUREN W. BRICKER

Unpublished Report

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Last Update: 04/07/1995
Document No.: 1063023
OWEN, SHELLEY MARIE

Cataloged by: WRO-CA-03 on 04/07/1995
Unpublished Report

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Last Update: 08/25/1995
Document No.: 1063050
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 08/25/1995
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Last Update: 08/31/1995
Document No.: 1063063
STURM, BRADLEY L., JANI MONK, AND IVAN H. STRUDWICK

Cataloged by: WRO-CA-03 on 08/31/1995
Unpublished Report

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Last Update: 10/25/1995
Document No.: 1063082
IRVINE, KENNETH C.

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Last Update: 06/18/1996
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MCKENNA, JEANETTE A. AND RICHARD S. SHEPARD

Cataloged by: WRO-CA-03 on 06/18/1996
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1996 A PHASE I CULTURAL RESOURCE INVESTIGATION OF THE LANDINGS 750 LLC PROJECT AREA, A 200 +/- ACRE PROPERTY LOCATED IIN NORTH FONTANA, SAN BERNARDINO COUNTY, CA. 51PP. MCKENNA ET AL. SUBMITTED TO SUNCAL COMPANIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/15/1998 Cataloged by: WRO-CA-03 on 06/15/1998
Document No.: 1063173 Unpublished Report
MCKENNA, JEANETTE A. AND RICHARD S. SHEPARD

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Last Update: 06/15/1998 Cataloged by: WRO-CA-03 on 06/15/1998
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MCKENNA, JEANETTE A. AND RICHARD S. SHEPARD

1996 A PHASE I CULTURAL RESOURCES INVESTIGATION OF THE SUMMIT HEIGHTS PROJECT AREA, LOCATED IN NORTH FONTANA, SAN BERNARDINO COUNTY, CA. 35PP. MCKENNA ET AL. SUBMITTED TO URBAN LOGIC CONSULTANTS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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SCIENTIFIC RESOURCE SURVEY, INC.

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Document No.: 1063277 Unpublished Report
LOVE, BRUCE AND BAI TOM TANG

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Last Update: 10/07/1998 Cataloged by: WRO-CA-03 on 10/07/1998
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MCLEAN, DEBORAH AND JAY MICHALSKY

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WHITE, ROBERT AND LAURIE S. WHITE

1993 AN ARCHAEOLOGICAL ASSESSMENT OF THE 762-ACRE OAK SUMMIT PROJECT

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Last Update: 10/07/1998
Document No.: 1063280
BECKER, KENNETH M.

Cataloged by: WRO-CA-03 on 10/07/1998
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1998 A CULTURAL RESOURCES RECONNAISSANCE OF TT15814, APPROXIMATELY 40 ACRES LOCATED IN RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 23PP. RMW PALEO. SUBMITTED TO FIELDSTONE COMMUNITIES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/07/1998
Document No.: 1063281
BECKER, KENNETH M.

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Last Update: 10/07/1998
Document No.: 1063450
ANTHONY, CHET

Cataloged by: WRO-CA-03 on 10/07/1998
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Last Update: 12/04/2001
Document No.: 1063454
BROWN, JOAN

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Last Update: 12/04/2001
Document No.: 1063455
TETRA TECH

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Last Update: 12/04/2001
Document No.: 1063456
BROWN, JOAN AND TIM GREGORY

Cataloged by: WRO-CA-03 on 12/04/2001
Unpublished Report

1998 A CULTURAL RESOURCES RECONNAISSANCE FOR THE RANCHO SUMMIT, LLC

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Last Update: 12/04/2001
Document No.: 1063457
DEMCAK, CAROL

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Last Update: 12/04/2001
Document No.: 1063459
DUKE, CURT

Cataloged by: WRO-CA-03 on 12/04/2001
Unpublished Report

2000 AT&T WIRELESS SERVICES FACILITY C959.1. 6PP. LSA. SUBMITTED TO
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Last Update: 12/04/2001
Document No.: 1063527
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 12/04/2001
Unpublished Report

2000 A PHASE I CULTURAL RESOURCES INVENTORY OF THE FONTANA UNIFIED SCHOOL
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Last Update: 12/05/2001
Document No.: 1063528
DUKE, CURT

Cataloged by: WRO-CA-03 on 12/05/2001
Unpublished Report

2000 CULTURAL RESOURCES ASSESSMENT FOR PACIFIC BELL WIRELESS FACILITY: CM
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CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/05/2001
Document No.: 1063529
GRENDA, DONN, CHRISTOPHER DOOLITTLE, AND MATTHEW A. STERNER

Cataloged by: WRO-CA-03 on 12/05/2001
Unpublished Report

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Last Update: 12/05/2001
Document No.: 1063537
LOVE, BRUCE

Cataloged by: WRO-CA-03 on 12/05/2001
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Last Update: 12/05/2001 Cataloged by: WRO-CA-03 on 12/05/2001
Document No.: 1063555 Unpublished Report
OSTASHAY, JANET AND LESLIE HEUMANN

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Last Update: 12/06/2001 Cataloged by: WRO-CA-03 on 12/06/2001
Document No.: 1063558 Unpublished Report
DUKE, CURT

2000 CULTURAL RESOURCE ASSESSMENT FOR PBMS WIRELESS FACILITY CM 264-02, COUNTY OF SAN BERNARDINO, CA. 5PP. LSA. SUBMITTED TO PBMS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002 Cataloged by: WRO-CA-03 on 08/07/2002
Document No.: 1063567 Unpublished Report
JENSEN, PETER

2001 ARCHAEOLOGICAL INVENTORY SURVEY OF SB54XC412 CELL TOWER SITE, UPLAND MEMORIAL PARK, CITY OF UPLAND, CA. 9PP. JENSON & ASSOCIATES. SUBMITTED TO ROBERT YOUNG & ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002 Cataloged by: WRO-CA-03 on 08/07/2002
Document No.: 1063568 Unpublished Report
KING, L.D.

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Last Update: 08/07/2002 Cataloged by: WRO-CA-03 on 08/07/2002
Document No.: 1063571 Unpublished Report
LAPIN, PHILLIPE

2000 CULTURAL RESOURCE ASSESSMENT FOR PBMS FACILITY CM 354-01, COUNTY OF SAN BERNARDINO, CA. 4PP. LSA. SUBMITTED TO PBMS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002 Cataloged by: WRO-CA-03 on 08/07/2002
Document No.: 1063572 Unpublished Report
DUKE, CURT

2001 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY SB 139-01, SAN BERNARDINO COUNTY, CA. 9PP. LSA. SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002
Document No.: 1063575
DUKE, CURT

Cataloged by: WRO-CA-03 on 08/07/2002
Unpublished Report

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Last Update: 08/07/2002
Document No.: 1063576
DUKE, CURT

Cataloged by: WRO-CA-03 on 08/07/2002
Unpublished Report

2000 CULTURAL RESOURCE ASSESSMENT FOR AT&T WIRELESS FACILITY C870.1, COUNTY OF SAN BERNARDINO, CA. 4PP. LSA. SUBMITTED TO AT&T. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002
Document No.: 1063577
LAPIN, PHILLIPE

Cataloged by: WRO-CA-03 on 08/07/2002
Unpublished Report

2000 CULTURAL RESOURCE ASSESSMENT FOR PBW FACILITY CM 233-01, SAN BERNARDINO COUNTY, CA. 6PP. LSA. SUBMITTED TO PBW. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 08/07/2002
Document No.: 1063578
DUKE, CURT

Cataloged by: WRO-CA-03 on 08/07/2002
Unpublished Report

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Last Update: 10/04/2002
Document No.: 1063579
DUKE, CURT

Cataloged by: WRO-CA-03 on 10/04/2002
Unpublished Report

1999 CULTURAL RESOURCES INVENTORY FOR PBMS FACILITY CM 359-04, COUNTY OF SAN BERNARDINO, CA 4PP. LSA. SUBMITTED TO PBMS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/05/2003
Document No.: 1063580
DUKE, CURT

Cataloged by: WRO-CA-03 on 02/05/2003
Unpublished Report

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Last Update: 02/07/2003

Cataloged by: WRO-CA-03 on 02/07/2003

Document No.: 1063581
LAPIN, PHILLIPE

Unpublished Report

2000 CULTURAL RESOURCE ASSESSMENT FOR PBW FACILITY CM 226-01, COUNTY OF SAN BERNARDINO, CA. 5PP. LSA. SUBMITTED TO PBW. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063582
DUKE, CURT

Cataloged by: WRO-CA-03 on 02/07/2003
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Last Update: 02/07/2003
Document No.: 1063585
BRECHBIEL, BRANT

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

1998 CULTURAL RESOURCE RECORDS SEARCH AND SURVEY REPORT FOR A PBMS TELECOMMUNICATIONS FACILITY: CM 029-15, RANCHO CUCAMONGA, CA. 4PP. LSA. SUBMITTED TO PBMS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063586
LOVE, BRUCE

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2000 ONTARIO TO COLTON PIPELINE, SAN BERNARDINO COUNTY, CA. 26PP. CRM TECH. SUBMITTED TO OGDEN ENVIRONMENTAL. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063588
LOVE, BRUCE

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2000 IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTY: AT&T WIRELESS SITE PB20002-115, CITY OF ONTARIO, SAN BERNARDINO COUNTY, CA. 33PP. CRM TECH. SUBMITTED TO TOM DODSON & ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063589
DE BARROS, PHILIP AND KENNETH SWIFT

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2001 CULTURAL RESOURCE SURVEY AND EVALUATION OF THE DE AMBROGIO VINEYARD INCLUDING THE DE AMBROGIO HOUSE AND VINEYARD STRUCTURES AT 10329 FOOTHILL BLVD, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 69PP. PROFESSIONAL ARCHAEOLOGICAL SERVICES. SUBMITTED TO BURNETT DEVELOPMENT CORP. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003

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Document No.: 1063591
OWEN, SHELLEY MARIE

Unpublished Report

1995 CULTURAL RESOURCE RECORD SEARCH AND MANAGEMENT PLAN FOR THE SAN SEVAINE REDEVELOPMENT PROJECT ARE, SAN BERNARDINO COUNTY, CA. 63PP. EIP ASSOCIATES. SUBMITTED TO SAN BERNARDINO COUNTY REDEVELOPMENT AGENCY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063592
MCLEAN, DEBORAH AND JANI MONK

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

1997 CULTURAL RESOURCE ASSESSMENT OF THE KAISER WEST END PROJECT, CITY OF FONTANA, SAN BERNARDINO COUNTY, CA. 12+PP. LSA. SUBMITTED TO KAISERVENTURES, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063593
ALEXANROWICZ, JOHN STEPHEN, S. ALEXANDROWICZ, D. WROBLESKI, R. KRAMER, A. STOLL, AND T. BELL

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

1998 HISTORICAL ARCHAEOLOGY AT EL RANCHO DE CUCAMONGA, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO CO, CA 2 VOL. 560PP. ACS. SUBMITTED TO CASTILLO COMPANY, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063594
DUKE, CURT

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2000 CULTURAL RESOURCE ASSESSMENT FOR AT&T WIRELESS SERVICES FACILITY C568.1, COUNTY OF SAN BERNARDINO, CA. 5PP. LSA. SUBMITTED TO AT&T WIRELESS SERVICES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063595
DUKE, CURT

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2000 CULTURAL RESOURCES ASSESSMENT FOR PBW FACILITY SB 101-01, COUNTY OF SAN BERNARDINO, CA. 500. LSA. SUBMITTED TO PBW. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/07/2003
Document No.: 1063632
DICE, MICHAEL

Cataloged by: WRO-CA-03 on 02/07/2003
Unpublished Report

2001 PHASE I ARCHAEOLOGICAL ASSESSMENT OF THE EMPIRE HOMES II PROJECT, A 25-ACRE RESIDENTIAL PROJECT LOCATED IN THE CITY OF RANCHO CUCAMONGA, CA. 48PP. L&L ENVIRONMENTAL. SUBMITTED TO EMPIRE HOMES, LLC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 02/04/2004
Document No.: 1063773
LOVE, BRUCE

Cataloged by: WRO-CA-03 on 02/04/2004
Unpublished Report

2002 HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT: ETIWANDA EARLY EDUCATIONS CENTER, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 19PP. CRM TECH. SUBMITTED TO SAN BERNARDINO COUNTY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/10/2004
Document No.: 1063774
HATHEWAY, ROGER

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2001 CULTURAL RESOURCE MANAGEMENT & DETERMINATION OF ELIGIBILITY REPORT FOR THE MARCUS KEMP HOUSE. 61PP. TETRA TECH, INC. SUBMITTED TO COLORADO PACIFIC COMMUNITIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/10/2004
Document No.: 1063775
CHANDLER, EVELYN

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2001 CULTURAL RESOURCE RECORD SEARCH AND LITERATURE REVIEW REPORT FOR AN AMERICAN TOWER CORPORTATION TELECOMMUNICATION FACILITY BC_773-n1, HERITAGE PARK IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 10PP. CHAMBERS GROUP. Submitted to PARATUS, INC. Unpublished report on file at S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/10/2004
Document No.: 1063776
COTTERMAN, CARY

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2001 CULTURAL RESOURCES RECORD SEARCH, LITERATURE REVIEW & RECONNAISSANCE REPORT FOR AN ATC TELECOMMUNICATIONS FACILITY BC_775_n1, HERMOSA PARK IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 11PP. CHAMBERS GROUP. Submitted to PARATUS, INC. Unpublished report on file at S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/10/2004
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COTTERMAN, CARY

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2001 CULTURAL RESOURCE RECORD SEARCH, LITERATURE REVIEW & RECONNAISSANCE REPORT FOR AN ATC TELECOMMUNICATIONS FACILITY BC_368_n1, VICTORIA PARK IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 10PP. CHAMBERS GROUP. Submitted to PARATUS, INC. Unpublished report on file at S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/10/2004
Document No.: 1063781
DUKE, CURT

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2000 CULTURAL RESOURCE ASSESSMENT FOR AT&T WIRELESS SERVICES FACILITY C960.1, COUNTY OF SAN BERNARDINO, CA. 4PP. LSA. SUBMITTED TO AT&T.

UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 11/10/2004
Document No.: 1063782
DUKE, CURT

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT: AT&T WIRELESS SERVICES FACILITY C960A,
SAN BERNARDINO COUNTY, CA. 7PP. LSA. SUBMITTED TO GEOTRANS. UNPUBLISHED
REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA
92374.

Last Update: 11/10/2004
Document No.: 1063962
BILLAT, SCOTT

Cataloged by: WRO-CA-03 on 11/10/2004
Unpublished Report

2002 HERMOSA PARK CA-7141A, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA.
11PP. EARTHTOUCH, LLC. SUBMITTED TO NEXTEL. UNPUBLISHED REPORT ON FILE
AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063963
BONNER, WAYNE

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT FOR SB186-01 (THE HERITAGE PARK SITE)
LOCATED AT 5500 BERYL ST, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA.
14PP. W H BONNER ASSOCIATES. SUBMITTED TO ALARIS GROUP. UNPUBLISHED
REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA
92374.

Last Update: 10/13/2005
Document No.: 1063964
TANG, BAI, MICHAEL HOGAN, AND JOSH SMALLWOOD

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2003 HISTORICAL/ARCHAEOLOGICAL RESOURCES RECORDATION: A PORTION OF
SCHOWALTER ROCK PILE, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY,
CA. 22PP. CRM TECH. SUBMITTED TO STONERIDGE DEVELOPMENT. CONTRACT NO.
\. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,
REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063965
BONNER, WAYNE

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2002 A PHASE I ARCHAEOLOGICAL FIELD STUDY FOR CINGULAR WIRELESS SITE SB
185-01 (THE ALTA LOMA CHURCH SITE) LOCATED AT 9720 WILSON AVE, RANCHO
CUCAMONGA, SAN BERNARDINO COUNTY, CA. 14PP. W H BONNER ASSOCIATES.
SUBMITTED TO ALARIS GROUP. UNPUBLISHED REPORT ON FILE AT S.B. CO.
MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063966
WHITE, LAURA S., ROBERT S. WHITE, AND DAVID M. VAN HORN

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2003 AN HISTORIC BUILDING ASSESSMENT OF A RESIDENTIAL PROPERTY LOCATED AT 6714 AMETHYST AVE, ALTA LOMA ARE OF THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 21PP. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO MANNING HOMES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063967
BUDINGER, FRED

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2003 A PHASE I ARCHAEOLOGICAL SURVEY OF APPROXIMATELY 28 ACRES OF THE PROPOSED CARRIAGE III PROJECT (TT 16466), RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 69PP. TETRA TECH. SUBMITTED TO PACIFIC CREST COMMUNITIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063968
BUDINGER, FRED

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2001 ARCHAEOLOGICAL SURVEY OF 45 ACRES IN TEH NW 1/4 OF SECTION 33, T1N R6W SBBM IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 28PP. TETRA TECH. SUBMITTED TO COLORADO PACIFIC COMMUNITIES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063969
LEWIS, DON

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT: SB 183, ETIWANDA CREEK PARK, 5939 EAST AVE, RANCHO CUCAMONGA, CA. 18PP. ALARIS GROUP. SUBMITTED TO CINGULAR. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063970
DUKE, CURT

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2004 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY SB 282-01, CITY OF RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, CA. 34PP. LSA. SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005
Document No.: 1063971
KYLE, CAROLYN

Cataloged by: WRO-CA-03 on 10/13/2005
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT FOR CINGULAR WIRELESS FACILITY SB 184-01, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 12PP. KYLE CONSULTING. SUBMITTED TO PARATUS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/13/2005

Cataloged by: WRO-CA-03 on 10/13/2005

Document No.: 1064019
MCKENNA, JEANETTE A.

Unpublished Report

2002 A PHASE I CULTURAL RESOURCE INVESTIGATION OF THE TENTATIVE TRACT 16291, THE RUSSO PROPERTY, IN THE CITY OF FONTANA, SAN BERNARDINO COUNTY, CA. 42PP. MCKENNA ET AL. SUBMITTED TO MR CONSTRUCTION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/18/2006
Document No.: 1064023
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 07/18/2006
Unpublished Report

2002 ARCHAEOLOGICAL MONITORING, FONTANA PROPERTY. 7PP. MCKENNA ET AL. SUBMITTED TO LEWIS HOMES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 11/13/2006
Document No.: 1064033
BUDINGER, FRED

Cataloged by: WRO-CA-03 on 11/13/2006
Unpublished Report

2001 PROPOSED WIRELESS DEVICE MONOPOLE & EQUIPMENT CABINET SITE, 8248 19TH ST, RANCHO CUCAMONGA, CA. 9PP. TETRA TECH. SUBMITTED TO VERIZON. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/19/2007
Document No.: 1064097
TANAGUCHI, CHRISTEEN

Cataloged by: WRO-CA-03 on 04/19/2007
Unpublished Report

2003 RECORDS SEARCH RESULTS & SITE VISIT FOR CINGULAR TELECOMMUNICATION FACILITY SB 226-02 (UPLAND MEMORIAL PARK), 1100 E. FOOTHILL BLVD, CITY OF UPLAND, SAN BERNARDINO COUNTY, CA. 8PP. MICHAEL BRANDMAN ASSOCIATES. SUBMITTED TO ENVIRONMENTAL ASSESSMENT SPECIALISTS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/01/2007
Document No.: 1064135
BUDINGER, FRED

Cataloged by: WRO-CA-03 on 06/01/2007
Unpublished Report

2003 A SECTION 106 HISTORIC PRESERVATION REVIEW OF THE PROPOSED VERIZON WIRELESS WINERY UNMANNED CELLULAR TELECOMMUNICATIONS SITE TO BE LOCATED AT 9951 8TH ST, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 47PP. TETRA TECH. SUBMITTED TO VERIZON WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064138
TANG, BAI

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 IDENTIFICATION & EVALUATION OF HISTORIC PROPERTIES: FOURTH ST RECYCLED WATER PIPELINE IN AND NEAR THE CITIES OF ONTARIO & RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 29PP. CRM TECH. SUBMITTED TO TOM DODSON ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024

ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064139
HOGAN, MICHAEL AND BAI TANG

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2004 ADDENDUM TO HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY: FOURTH ST RECYCLED WATER PIPELINE IN AND NEAR THE CITIES OF ONTARIO & RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 4PP. CRM TECH. SUBMITTED TO TOM DODSON ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064140
TANG, BAI AND MIRIAM DAHDUL

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 IDENTIFICATION & EVALUATION OF HISTORIC PROPERTIES: ETIWANDA AVE EXTENSION RECYCLED WATER PIPELINE IN AND NEAR THE CITY OF RANCHO CUCMONGA, SAN BERNARDINO COUNTY, CA. 18PP. CRM TECH. SUBMITTED TO TOM DODSON ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064141
DAHDUL, MIRIAM

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 IDENTIFICATION & EVALUATION OF HISTORICAL PROPERTIES: WHITTRAM AVE RECYCLED WATER PIPELINE IN AND NEAR THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 21PP. CRM TECH. SUBMITTED TO TOM DODSON ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064142
TANG, BAI AND JOSH SMALLWOOD

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 IDENTIFICATION & EVALUATION OF HISTORICAL PROPERTIES: RECYCLED WATER FACILITIES IMPROVEMENTS PROJECT, REGIONAL PLANTS NO. 1 & NO. 4, CITIES OF ONTARIO & RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 26PP. CRM TECH. SUBMITTED TO TOM DODSON ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064144
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 AN EVALUATION OF TWO HISTORIC STRUCTURES AT THE INTERSECTION OF CHARLES SMITH (ROCHESTER AVE) & 6TH ST, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 27PP. MCKENNA ET AL. SUBMITTED TO RICHARD WAGNER\.
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064145

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

MCKENNA, JEANETTE A.

2002 A PHASE I CULTURAL RESOURCE INVESTIGATION OF 7179 EAST AVE, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 45PP. MCKENNA ET AL. SUBMITTED TO AMERICAN PACIFIC HOMES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064146
GOODWIN, RIORDAN

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2004 CULTURAL RESOURCE ASSESSMENT: PGP CRESCENT BUSINESS CENTER, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 11PP. LSA. SUBMITTED TO PGP PARTNERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064147
WHITE, LAURA S. AND ROBERT S.

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2003 A CULTURAL RESOURCE ASSESSMENT OF A 1.68 ACRE PARCEL LOCATED AT THE SW CORNER OF BASELINE RD & HERMOSA AVE, CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 19PP. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO PINEWAVE DESIGN & ENGINEERING. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064148
LEWIS, DON

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT: SB 182-01, CUCAMONGA MIDDLE SCHOOL, RANCHO CUCAMONGA, CA. 14PP. ALARIS GROUP. SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 09/18/2007
Document No.: 1064152
BILLAT, LORNA

Cataloged by: WRO-CA-03 on 09/18/2007
Unpublished Report

2002 NEXTEL COMMUNICATIONS PROPOSED WIRELESS TELECOMMUNICATIONS SERVICE FACILITIES IN SOUTHERN CALIFORNIA--CA 6685E ONTARIO. 13PP. EARTHTOUCH, LLC. SUBMITTED TO NEXTEL. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064155
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2001 A PHASE I CULTURAL RESOURCE INVESTIGATION OF TRACT 16191, A 10 ACRE PARCEL IN THE CITY OF FONTANA, SAN BERNARDINO COUNTY, CA. 32PP. MCKENNA ET AL. SUBMITTED TO SD ENGINEERING ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008

Cataloged by: WRO-CA-03 on 01/14/2008

Document No.: 1064156
DUKE, CURT

Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY NO. CM226-03, SAN BERNARDINO COUNTY, CA. 5PP. LSA. SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064157
MASON, ROGER D.

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2001 CULTURAL RESOURCES RECORDS SEARCH & LITERATURE REVIEW FOR AN ALL AMERICAN TOWER CORPORATION TELECOMMUNICATIONS FACILITY: NUMBER BC_368_N4 WINERY IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 19PP. CHAMBERS GROUP. SUBMITTED TO PARATUS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064158
DUKE, CURT

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2001 CULTURAL RESOURCE ASSESSMENT: AT&T WIRELESS FACILITY NO. D115, SAN BERNARDINO COUNTY, CA. 10PP. LSA. SUBMITTED TO GEOTRANS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064160
WHITE, ROBERT S. AND LAURA S. WHITE

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2002 A CULTURAL RESOURCE ASSESSMENT OF A 9.26 ACRE PARCEL LOCATED ADJACENT TO E. 9TH ST IN THE CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 15PP. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO STOWE PASCO DEVELOPMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064162
DUKE, CURT

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2002 CULTURAL RESOURCE ASSESSMENT: AT&T WIRELESS SERVICES FACILITY NO. D121, SAN BERNARDINO COUNTY, CA. 9PP. LSA. SUBMITTED TO GEOTRANS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064163
DICE, MICHAEL

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2002 PHASE I ARCHAEOLOGICAL SURVEY & VISUAL IMPACT ASSESSMENT RESULTS FOR BECHTEL/AT&T TELECOMMUNICATIONS FACILITY 95100301D (SCE RANCHO), 10127 BASELINE RD, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 6PP. MICHAEL BRANDMAN ASSOCIATES. SUBMITTED TO ATC ASSOCIATES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064165
DUKE, CURT

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2003 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY NO.
SB225-01, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 18PP. LSA.
SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO.
MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064166
MCLEAN, DEBORAH

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

1999 I-10 INTERCHANGE AT ETIWANDA AVE. 5PP. LSA. SUBMITTED TO DEPARTMENT
OF TRANSPORTATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024
ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064169
WESSON, ALEX, CHRISTINE HACKING, AND KIRSTEN ERICKSON

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2003 HAVEN AVE GRADE SEPARATION AT SCRRA RAILROAD TRACKS. 48PP. URS
CORPORATION. SUBMITTED TO CITY OF RANCHO CUCAMONGA. UNPUBLISHED REPORT
ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064170
DUKE, CURT

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2001 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY NO.
SB139-01, SAN BERNARDINO COUNTY, CA. 12PP. LSA. SUBMITTED TO CINGULAR
WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE
TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064172
BILLAT, LORNA

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2003 PROPOSED CELL TOWER PROJECT: ONTARIO MILLS (CA-6686A). 14PP.
EARTHTOUCH, INC. SUBMITTED TO NEXTEL. UNPUBLISHED REPORT ON FILE AT S.B.
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008
Document No.: 1064173
HARPER, CAPRICE

Cataloged by: WRO-CA-03 on 01/14/2008
Unpublished Report

2004 CULTURAL RESOURCE ASSESSMENT: CINGULAR WIRELESS FACILITY SB303-02,
RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 6PP. LSA. SUBMITTED TO
CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024
ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/14/2008

Cataloged by: WRO-CA-03 on 01/14/2008

Document No.: 1064206
HAMMOND, STEPHEN

Unpublished Report

2003 INLAND EMPIRE TRAFFIC MANAGEMENT CENTER. 7PP. CALTRANS. SUBMITTED TO DEPT OF TRANSPORTATION. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/17/2008
Document No.: 1064216
MANLEY, WILLIAM

Cataloged by: WRO-CA-03 on 07/17/2008
Unpublished Report

1997 HISTORIC AMERICAN BUILDINGS SURVEY DOCUMENTATION FOR THE CHAFFEY/ISLE HOUSE, 6490 ETIWANDA AVE, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 57PP. MANLEY CONSULTING. SUBMITTED TO NPS. CONTRACT NO. HABS #CA-2677. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/17/2008
Document No.: 1064217
PLETKA, NICOLE

Cataloged by: WRO-CA-03 on 07/17/2008
Unpublished Report

2003 CULTURAL RESOURCES ASSESSMENT: NEXTEL COMMUNICATIONS FACILITY NO. CA-7167-A, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 7PP. LSA. SUBMITTED TO GEOTECHNICAL SOLUTIONS, INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/17/2008
Document No.: 1064218
HARPER, CAPRICE D.

Cataloged by: WRO-CA-03 on 07/17/2008
Unpublished Report

2004 CULTURAL RESOURCES ASSESSMENT: CINGULAR WIRELESS FACILITY NO. SB 300-01, RANCHO CUCAMONGA, SAN BERNARDINO COUNTY, CA. 14PP. LSA. SUBMITTED TO CINGULAR WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/17/2008
Document No.: 1064219
WHITE, LAURIE S. AND ROBERT S. WHITE

Cataloged by: WRO-CA-03 on 07/17/2008
Unpublished Report

2003 AN HISTORIC BUILDING ASSESSMENT OF THE TOEWS BARN LOCATED AT 5550 ARCHIBALD AVE, ALTA LOMA AREA OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY. 46PP. ARCHAEOLOGICAL ASSOCIATES. SUBMITTED TO MANNING HOMES. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/17/2008
Document No.: 1064264
MCKENNA, JEANETTE A.

Cataloged by: WRO-CA-03 on 07/17/2008
Unpublished Report

2004 CA-506X, 508X & 509X (SPEEDWAY), 9300 CHERRY AVE, FONTANA, CA. 20PP. MCKENNA ET AL. SUBMITTED TO NEXTEL. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/18/2008

Cataloged by: WRO-CA-03 on 07/18/2008

Document No.: 1064268
O'CONNELL, KEITH

Unpublished Report

2003 VERIZON WIRELESS SITE 36298447.00447, ALTA LOMA. 15PP. URS CORPORATION. SUBMITTED TO VERIZON WIRELESS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 07/18/2008
Document No.: 1064367
STEELY, JAMES S.

Cataloged by: WRO-CA-03 on 07/18/2008
Unpublished Report

2004 CULTURAL RESOURCES ASSESSMENT: "CEMENT IRRIGATION WEIR" (DOMESTIC WATER CISTERN), ETWANDA AVE AT ARAPAHO RD INTERSECTION, EXTREME NORTHEAST PART OF TT 16867. 11PP. SWCA. SUBMITTED TO ETCO INVESTMENTS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/31/2008
Document No.: 1064380
DICE, MICHAEL AND CHRISTEEN TANAGUCHI

Cataloged by: WRO-CA-03 on 10/31/2008
Unpublished Report

2004 REVISED CULTURAL RECORDS SEARCH & SURVEY RESULTS (WITH ARCHITECTURAL SIGNIFICANCE EVALUATION) FOR THE VAN DAELE-FRITZ PROPERTY, 3104 BASE LINE RD, RANCHO CUCAMONGA, CA. 12PP. MICHAEL BRANDMAN ASSOCIATES. SUBMITTED TO VAN DAELE DEVELOPMENT COMPANY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/31/2008
Document No.: 1064381
THAL, SEAN

Cataloged by: WRO-CA-03 on 10/31/2008
Unpublished Report

2004 JASMINE/CA-8520D. 16PP. EARTH TOUCH, LLC. SUBMITTED TO NEXTEL. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 10/31/2008

Ca

Overview Reports

Document No.: 1060447
SCOTT, M. B.

Unpublished Report

1976 DEVELOPMENT OF WATER FACILITIES IN THE SANTA ANA RIVER BASIN, CALIFORNIA, 1810-1968. M. B. SCOTT. SUBMITTED TO U.S. GEOLOGICAL SURVEY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/05/1989
Document No.: 1060492
SIMPSON, RUTH D., LAVERNA ARNOLD BROWN, AND JOSEPH HEARN

Cataloged by: WRO-CA-03 on 12/07/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF PROPOSED BLOOMINGTON WASTEWATER FACILITIES PLAN. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1060500
HEARN, JOSEPH E.

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF APPROXIMATELY NINETEEN ACRES LOCATED WEST OF RAMONA AVENUE AND SOUTH OF HOLT BOULEVARD IN THE MONTCLAIR AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO L. D. KING ENGINEERING CO., INC. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/09/1988
Document No.: 1061115
BEAN, LOWELL JOHN AND SYLVIA BRAKKE VANE

Cataloged by: WRO-CA-03 on 12/09/1988
Unpublished Report

1981 NATIVE AMERICAN PLACES IN THE SAN BERNARDINO NATIONAL FOREST, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA. CULTURAL SYSTEMS RESEARCH, INC. SUBMITTED TO U.S. FOREST SERVICE. CONTRACT NO. 53-9JA9-0-212. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/05/1989
Document No.: 1061300
CARRICO, RICHARD, ALLAN SCHILZ, FRANK NORRIS, AND RICHARD MINNICH

Cataloged by: WRO-CA-03 on 03/06/1989
Unpublished Report

1982 CULTURAL RESOURCE OVERVIEW: SAN BERNARDINO NATIONAL FOREST, CALIFORNIA. WESTEC SERVICES, INC. SUBMITTED TO U.S. FOREST SERVICE. CONTRACT NO. 53-9JA9-0-219. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 04/14/1989
Document No.: 1061425
ALTSCHUL, JEFFREY H., MARTIN R. ROSE, AND MICHAEL K. LERCH

Cataloged by: WRO-CA-03 on 04/14/1989
Unpublished Report

1984 MAN AND SETTLEMENT IN THE UPPER SANTA ANA RIVER DRAINAGE: A CULTURAL RESOURCES OVERVIEW. STATISTICAL RESEARCH. SUBMITTED TO U.S. ARMY CORPS OF ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 05/10/1989
Document No.: 1061580
MCINTYRE, MICHAEL J.

Cataloged by: WRO-CA-03 on 05/10/1989
Unpublished Report

1986 CULTURAL RESOURCE OVERVIEW FOR THE ANGELES NATIONAL FOREST. MICHAEL J. MCINTYRE. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/12/1989
Document No.: 1062261
ROBINSON, JOHN W. AND BRUCE R. RISHER

Cataloged by: WRO-CA-03 on 06/12/1989
Journal Article

1990 SAN BERNARDINO NATIONAL FOREST: A CENTURY OF FEDERAL STEWARDSHIP. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION QUARTERLY, 37(4):1-88.

Last Update: 10/30/1991

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Reports Not in Database

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Appendix E-2
SB 18 Documentation



THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.E.
Mayor Pro Tem
L. DENNIS MICHAEL
Councilmember
REX GUTTERRE
SAM SPAGNOLI
DIANE WILLIAM
City Manager
JACK LAM, AICP

March 3, 2008

State of California
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Attn: Debbie Treadway

SUBJECT: SB 18 Consultation List, General Plan Update
City of Rancho Cucamonga, San Bernardino County, CA

Dear Ms. Treadway:

The City of Rancho Cucamonga is updating its General Plan. As part of the update process, the City would like to initiate consultation with Native American Tribes on the SB 18 Consultation List in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). As indicated on the enclosed map, the General Plan Update project area includes the entire City of Rancho Cucamonga in addition to its spheres of influence.

Please provide the names of appropriate tribes and contact persons on the SB 18 Consultation List, including addresses, telephone and facsimile numbers (with e-mail addresses, if applicable) at your earliest convenience, so we can commence Native American consultation. We would sincerely appreciate limiting our recommended contacts to groups who are culturally affiliated with the specific project area, and not include all contacts for San Bernardino County, if possible.

Please contact me if you have any questions or require additional information. Thank you in advance for your expedited assistance with this matter.

Sincerely,

Corkran Nicholson
City of Rancho Cucamonga
Assistant Planning Director

CN/ls

Attachment

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net



March 10, 2008

Mr. Corkran Nicholson, Assistant Planning Director

CITY OF RANCHO CUCAMONGA

P.O. Box 807
Rancho Cucamonga, CA 91729

Sent by FAX to: 909-477-2849

Number of pages: 2

Re: Tribal Consultation Per Government Code §§ 65352.3, 65352.4 and 65562.5 (SB 18) for General Plan Update; City of Rancho Cucamonga; San Bernardino County, California

Dear Mr. Nicholson:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. The Native American Heritage Commission is the state agency designated for the protection of Native American Cultural Resources. Attached is a consultation list of tribes with traditional lands or cultural places located within the Project Area of Potential Effect (APE).

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS contact 916-653-7278 or www.ohp.ca.gov) to determine if any cultural places are located within the area(s) affected by the proposed action. NAHC Sacred Lands File requests must be made in writing. All requests must include county, USGS quad map name, township, range and section. Local governments should be aware, however, that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.

The Native American Heritage Commission works with Native American tribal governments regarding its identification of 'Areas of Traditional Use.' The Commission may adjust the submitted data defining the 'Area of Traditional Use' in accordance with generally accepted ethnographic, anthropological, archeological research and oral history. Also, the Area of Traditional Use is an issue appropriate for the government-to-government consultation process.

If you have any questions, please contact me at (916) 653-6251.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Singleton".

Dave Singleton
Program Analyst

Attachment: Native American Tribal Consultation List

Native American Tribal Consultation List
San Bernardino County

March 10, 2008

Cahuilla Band of Indians
Anthony Madrigal, Jr., Chairperson
P.O. Box 391760 Cahuilla
Anza, CA 92539
tribalcouncil@cahuilla.net
(951) 763-2631

Gabrielino Band of Mission Indians of CA
Ms. Susan Frank
PO Box 3021 Gabrielino
Beaumont, CA 92223
(951) 897-2536 Phone/Fax

San Manuel Band of Mission Indians
Henry Duro, Chairperson
26569 Community Center Drive Serrano
Highland, CA 92346
(909) 864-8933
(909) 864-3724 - FAX

Morongo Band of Mission Indians
Robert Martin, Chairperson
11581 Potrero Road Cahuilla
Banning, CA 92220 Serrano
Robert_Martin@morongo.org
(951) 849-8807
(951) 755-5200

Soboba Band of Mission Indians
Chairperson
P.O. Box 487 Luiseno
San Jacinto, CA 92581
varres@soboba-nsn.gov
(951) 654-2765

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula, CA 92593
tbrown@pechanga-nsn.gov
(951) 676-2768

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel, CA 91778
ChiefRBwife@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 483--3564 cell

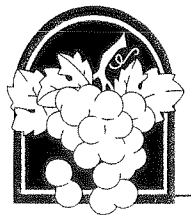
Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive Serrano
Highland, CA 92346
(909) 862-9883

San Luis Rey Band of Mission Indians
Russell Romo, Chairman
12064 Old Pomerado Road Luiseno
Poway, CA 92064
(858) 748-1586

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3.



RANCHO
CUCAMONGA

THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP

July 16, 2008

Cahuilla Band of Indians
Anthony Madrigal, Jr., Chairperson
P.O. Box 391760
Cahuilla Anza, CA 92539

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Madrigal:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

Your participation in this local planning process is important. We recognize that cultural places are essential elements in tribal culture, traditions, heritages, and identities, and wish to establish a meaningful dialogue in order to identify cultural places and consider cultural places during our General Plan update process. The location of the City of Rancho Cucamonga in the context of the region is indicated on the enclosed map.

We would like your input during the General Plan update process. Please contact Corkran Nicholson, Assistant Planning Director for the City of Rancho Cucamonga (contact information below), to set up a meeting to discuss potential Native American cultural places within the planning area. Tribes have 90 days from the date of receipt of this notice to request consultation, per Government Code §65352.3(a)(2).

Thank you in advance; we look forward to your participation in this matter.

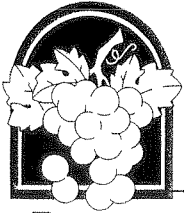
Sincerely,

Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

Attachment - Map

Mayor
DONALD J. KURTH, M.D.
Mayor Pro Tem
L. DENNIS MICHAEL
Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS
City Manager
JACK LAM, AICP



THE CITY OF RANCHO CUCAMONGA

RANCHO
CUCAMONGA

July 16, 2008

San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive
Highland, CA 92346

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Ramos:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

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Thank you in advance; we look forward to your participation in this matter.

Sincerely,

Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

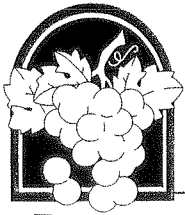
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Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
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City Manager
JACK LAM, AICP



THE CITY OF RANCHO CUCAMONGA

RANCHO
CUCAMONGA

July 16, 2008

Soboba Band of Mission Indians
Robert Salgado, Chairperson
P. O. Box 487
San Jacinto, CA 92581

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Salgado:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

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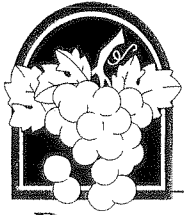
Sincerely,

Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson

Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

Attachment - Map



RANCHO
CUCAMONGA

THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP

July 16, 2008

Gabrieleno/Tonaga
San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
PO Box 693
San Gabriel, CA 91778

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Morales:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

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Sincerely,


Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

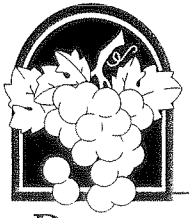
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Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP



THE CITY OF RANCHO CUCAMONGA

RANCHO
CUCAMONGA

July 16, 2008

San Luis Rey Band of Mission Indians
Russel Romo, Chairman
12064 Old Pomerado Road
Poway, CA 92064

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Morales:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

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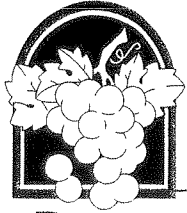
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Sincerely,

Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

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RANCHO
CUCAMONGA

THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.D.

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L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP

July 16, 2008

Morongo Band of Mission Indians
Robert Martin, Chairperson
11581 Potrero Road
Banning, CA 92220

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Martin:

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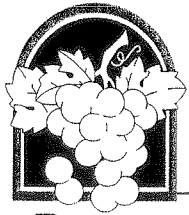
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Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

Attachment - Map



RANCHO
CUCAMONGA

THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP

July 16, 2008

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
PO Box 1477
Temecula, CA 92593

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Mr. Macarro:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

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Thank you in advance; we look forward to your participation in this matter.

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Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

Attachment - Map



THE CITY OF RANCHO CUCAMONGA

Mayor
DONALD J. KURTH, M.D.

Mayor Pro Tem
L. DENNIS MICHAEL

Councilmembers
REX GUTIERREZ
SAM SPAGNOLO
DIANE WILLIAMS

City Manager
JACK LAM, AICP

July 16, 2008

Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive
Highland, CA 92346

Re: GENERAL PLAN UPDATE AND SB 18 CONSULTATIONS - CITY OF RANCHO CUCAMONGA, SAN BERNARDINO COUNTY

Dear Ms. Walker:

The City of Rancho Cucamonga is in the process of a comprehensive update of our General Plan. As part of this process, the City would like to invite your tribe to participate in consultation in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004, defined in Government Code §65352.3). The General Plan fulfills many functions, but perhaps most importantly, it guides development through the establishment of a land use plan.

Your participation in this local planning process is important. We recognize that cultural places are essential elements in tribal culture, traditions, heritages, and identities, and wish to establish a meaningful dialogue in order to identify cultural places and consider cultural places during our General Plan update process. The location of the City of Rancho Cucamonga in the context of the region is indicated on the enclosed map.

We would like your input during the General Plan update process. Please contact Corkran Nicholson, Assistant Planning Director for the City of Rancho Cucamonga (contact information below), to set up a meeting to discuss potential Native American cultural places within the planning area. Tribes have 90 days from the date of receipt of this notice to request consultation, per Government Code §65352.3(a)(2).

Thank you in advance; we look forward to your participation in this matter.

Sincerely,

Lois J. Schrader
Planning Commission Secretary

Corkran W. Nicholson
Assistant Planning Director
(909) 477-2750; Monday-Thursday, 7:00 a.m. - 6:00 p.m.

Attachment - Map

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 864
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net



July 8, 2008

CITY OF RANCHO CUCAMONGA

Ms. Lois Schrader
CITY OF RANCHO CUCAMONGA
10500 Civic Center Drive
Rancho Cucamonga, CA 91729

JUL 08 2008

RECEIVED - PLANNING

Sent by FAX to: 909-477-2847
Number of pages: 2

Re: Tribal Consultation Per SB 18 (Government Code §§ 65352.3, 65352.4 and 65562.5) and Sacred Lands File Search for Project- General Plan Update, City of Rancho Cucamonga, San Bernardino County, California.

Dear Ms. Schrader:

Government Code §§ 65352.3, 65352.4 and 65562.5 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. Attached is a Native American Tribal Consultation list of tribes with traditional lands or cultural places located within the requested project boundaries.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS contact 916/653-7278 or www.ohp.ca.gov) to determine if any cultural places are located within the area(s) affected by the proposed action.

A NAHC Sacred Lands File search was conducted based on the township, range, and section information included in your request and no sites were found within the area of potential effect you identified. However, local governments should be aware that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place. I suggest you consult with all of those on the accompanying Native American Contacts list, which has been included separately. If they cannot supply information, they might recommend others with specific knowledge about cultural resources in your plan area. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from Tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Tribal Consultation List

**Native American Tribal Consultation List
San Bernardino County
July 8, 2008**

✓ Cahuilla Band of Indians
Anthony Madrigal, Jr., Chairperson
P.O. Box 391760 Cahuilla
Anza , CA 92539
tribalcouncil@cahuilla.net
(951) 763-2631

✓ Morongo Band of Mission Indians
Robert Martin, Chairperson
11581 Potrero Road Cahuilla
Banning , CA 92220 Serrano
Robert_Martin@morongo.org
(951) 849-8807
(951) 755-5200

✓ San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX

✓ Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula , CA 92593
tbrown@pechanga-nsn.gov
(951) 676-2768

✓ Soboba Band of Mission Indians
Robert Salgado, Chairperson
P.O. Box 487 Luiseno ✓
San Jacinto , CA 92581
dhill@soboba-nsn.gov
(951) 654-2765

✓ Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive Serrano
Highland , CA 92346
(909) 862-9883

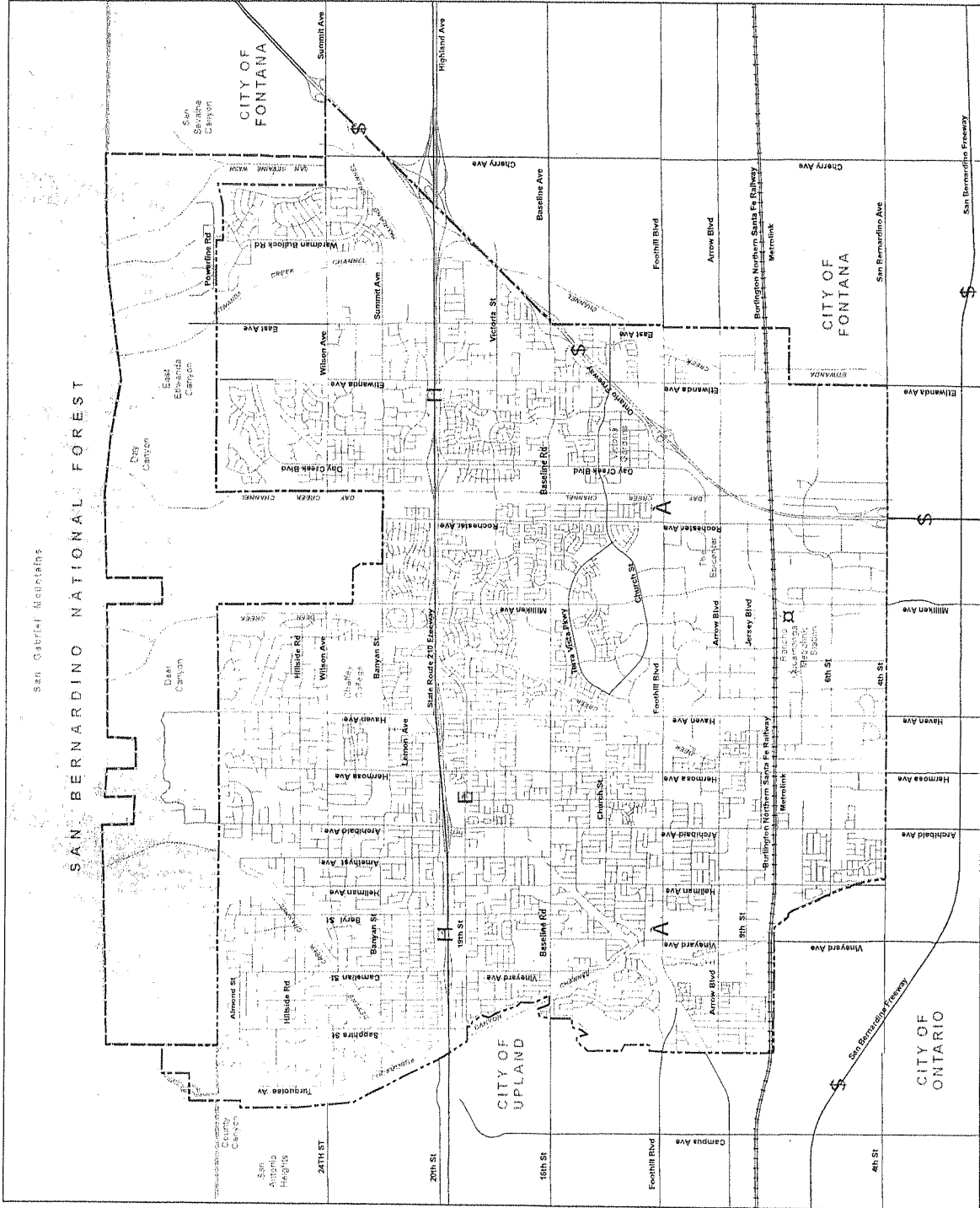
✓ Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
ChiefRBwife@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 483--3564 cell

✓ San Luis Rey Band of Mission Indians
Russell Romo, Chairman
12064 Old Pomerado Road Luiseno
Poway , CA 92064
(858) 748-1586

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3.



Legend

- Rancho Cucamonga City Boundary
- Sphere of Influence
- Railroad

Source: Rancho Cucamonga GIS, 2008



Planning Area Map

Rancho Cucamonga General Plan
 San Bernardino County, CA
 March 26, 2008
 P:\2237_Rancho Cucamonga City GIS\GISBase.mxd



STATE OF CALIFORNIA

Arnold Schwarzenegger, GOVERNOR

NATIVE AMERICAN HERITAGE COMMISSION

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 SACRAMENTO, CA 95814
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Dave Singleton
 Program Analyst

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San Bernardino County
July 8, 2008**

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(951) 654-2765

✓ Serrano Nation of Indians
Goldie Walker
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Highland , CA 92346
(909) 862-9883

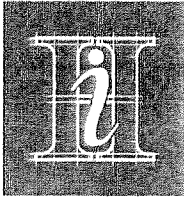
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PO Box 693 Gabrielino Tongva
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ChiefRBwife@aol.com
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This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3.



HOGLE-IRELAND

INC

A Land Planning & Development Consulting Firm

MEMORANDUM

November 19, 2008

TO: Corky Nicholson, Lois Schrader
City of Rancho Cucamonga

FROM: Sam Gennawey
John Kenyon

RE: SB 18 Tribal Consultations

The SB 18 process requires that the tribes have an opportunity to have input into land use decisions that may potentially affect them or their traditional lands. State law, however, does not specify what procedures to use to contact tribes. After speaking with the Native American Heritage Commission about this issue, it is our recommendation that, as a part of a good faith effort, the City take the following steps to contact tribes on the San Bernardino County Consultation List, in addition to sending the letters that went out on July 16, 2008:

- 1) Send an email to those tribes that have an email address listed. The email should include the notification letter sent out earlier along with a note explaining that the City had sent the letter and not yet received a reply.
- 2) Attempt to call each of the tribes at the various contact phone numbers on the Consultation List and convey the information contained in the letter.
- 3) Send a formal notice by certified mail of any public hearings that will address the General Plan update, particularly any on land use issues.

Please document all attempts to contact the tribes as well as any response.

Nicholson, Corky

From: Schrader, Lois
Sent: Monday, January 26, 2009 8:11 AM
To: 'Sam Gennawey'
Cc: Nicholson, Corky
Subject: Native American Tribal Consultation List (8)final comments1-26.xls
Attachments: Native American Tribal Consultation List (8)final comments1-26.xls

Sam, we received a late telephone response from the Garelino tribe, nothing unusual, see the comment box.

Name of Tribe	Contact Person	Phone Number	Received Ltr	e-mail	comments	Contact Completed
Cahuilla Band of Indians	Anthony Madrigal	951-763-2631		tribalcouncil@cahuilla.net		<input type="checkbox"/>
San Manuel Band of Mission Indians	Carol Tobin	909-864-8933	yes	ctobin@sanmanuel-nsn.gov		YES
Soboba Band of Mission Indians	Joe Ontiveros	951-654-2765	yes	jontiveros@soboba-nsn.gov		YES
Gabrieleno/Tonova San Gabriel Band of Mission		626-286-1632				
	Anthony Morales	626-286-1758 Hm 626-483-3564 Cell	yes	ChiefRBwife@aol.com		YES
San Luis Rey Band of Mission Indians	Russell Romo	858-748-1586				<input type="checkbox"/>
Morongo Band of Mission Indians	carmen Majito	760-724-8505	yes			<input type="checkbox"/>
Morongo Band of Mission Indians	Robert Martin	951-849-8807		Robert Martin@morongo.org		<input type="checkbox"/>
Pechanga Band of Mission Indians	Anna Hoover	951-308-9295 ext. 8102	yes	tbrown@pechanga-nsn.gov		YES
Serrano Naton of Indians	Goldie Walker	909-862-9883	yes			YES
Contacts in blue have not yet been verified						
Please see comments for activity on 12-8-08						
Waiting for return call or email						
Complete and confirmed						

Appendix E-3

Los Angeles County Museum Paleontological Records Search

23 February 2009

BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626-7969

Attn: Patrick Maxon, Director - Cultural Resources

re: Paleontological Resources for the proposed City of Rancho Cucamonga General Plan Update,
BonTerra Consulting Project Number Hogel J007, San Bernardino County, project area

Dear Patrick:

I have conducted a thorough search of our Vertebrate Paleontology records for the proposed City of Rancho Cucamonga General Plan Update, BonTerra Consulting Project Number Hogel J007, San Bernardino County, project area as outlined on the portions of the Mt. Baldy, Cucamonga Peak, Devore, Guasti, and Ontario USGS topographic quadrangle maps that you sent to me via e-mail on 28 January 2009. Most of the proposed project area has surficial sedimentary or metamorphic rocks that are unlikely to contain significant vertebrate fossils. At depth in most of the proposed project area, however, there may be sedimentary deposits that contain significant vertebrate fossils

For the portion of the proposed project area covered on the Mount Baldy quadrangle, in the very northwestern part of proposed project area there are exposures of gneissic metamorphic rocks in the elevated terrain around Cucamonga Creek, younger Quaternary gravels in the active Cucamonga Creek drainage, and older Quaternary fan deposits on very northeastern side of Cucamonga Creek. Otherwise this portion of the proposed project area has exposures composed of younger Quaternary Alluvium either as fan deposits from the San Bernardino Mountains to the north or as fluvial deposits from Cucamonga Creek.

For the portion of the proposed project area covered on the Cucamonga Peak quadrangle, the elevated terrain in very northern margin of western portion of the proposed project area has exposures of gneissic metamorphic rocks. Otherwise this entire portion of the proposed project area has exposures of younger Quaternary Alluvium derived primarily as fan deposits from the San Bernardino Mountains to the north, with some fluvial deposits in all the intermittent drainages.

For the portion of the proposed project area covered on the Devore quadrangle, this entire portion of the proposed project area has exposures of younger Quaternary Alluvium derived primarily as fan deposits from the San Bernardino Mountains to the north, with some fluvial deposits in all the intermittent drainages.

For the portion of the proposed project area covered on the Guasti quadrangle, there are exposures of older fan deposits in the elevated terrain around Red Hill on the very western side of the proposed project area. Otherwise this portion of the proposed project area has exposures of Quaternary Alluvium derived primarily as fan deposits from the San Bernardino Mountains to the north, with some fluvial deposits in the drainages, particularly around Cucamonga Creek in the western part and Deer Creek and Day Creek in the eastern part of this portion of the proposed project area.

For the portion of the proposed project area covered on the Ontario quadrangle, the entire portion of the proposed project area has exposures of younger Quaternary Alluvium derived primarily as fan deposits from the San Bernardino Mountains to the north.

Excavations in the gneissic metamorphic rocks in the elevated terrain in the northwestern portion of the proposed project area almost certainly will not encounter any significant vertebrate fossils. Similarly, excavations in the younger Quaternary gravels in the main active drainages and the older Quaternary fan deposits proximate to the San Bernardino Mountains in the north, and around Red Hill in the western portion of the proposed project area, probably will not to encounter significant vertebrate fossils. Shallow excavations in the younger Quaternary Alluvium exposed throughout most of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations in the latter area that extend down into older Quaternary deposits, however, may well encounter significant vertebrate fossils. Any substantial and deep excavations in the latter portions of the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,



Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: draft invoice

FOUNDATION INVOICE
NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

900 Exposition Boulevard, Los Angeles, California 90007

23 February 2009

INVOICE TO:

BonTerra Consulting
151 Kalmus Drive, Building E
Costa Mesa, CA 92626

Attn: Patrick Maxon, Director - Cultural Resources

Vertebrate Paleontology Records Check for paleontological resources for the proposed City of Rancho Cucamonga General Plan Update, BonTerra Consulting Project Number Hogel J007, San Bernardino County, project area

AMOUNT DUE: \$ 230.00

Paleontology Account #164-000 - invoice # VP090223A

PLEASE RETURN THIS STUB WITH YOUR REMITTANCE

This is a draft invoice for your information

**The official invoice will be sent separately by the
Natural History Museum of Los Angeles County
Finance Department**

Appendix E-4

Historic Resources Background Information

City of Rancho Cucamonga

Historic Resource Survey
Methodology and Findings

DRAFT

Prepared by Chattel Architecture, Planning & Preservation, Inc.
November 6, 2009

Table of Contents

<i>Introduction</i>	<i>1</i>
<i>Methodology</i>	<i>1</i>
<i>Summary of Previously Surveyed and Designated Resources</i>	<i>6</i>
<i>Findings</i>	<i>8</i>
<i>Regulatory Setting</i>	<i>9</i>

Attachments

Appendix A: Map of Survey Areas

Appendix B: Spreadsheet of Chattel Architecture's 2009 Survey Findings

Appendix C: Excerpt from San Bernardino County Historic Property Data File, dated December 3, 2007

Appendix D: Neighborhood Character Area (NCA) Records (California Department of Parks and Recreation DPR 523d forms)

Cucamonga NCA
North Town NCA
Alta Loma NCA
Etiwanda NCA
Red Hill NCA
Bear Gulch NCA
Postwar NCA

Introduction

The City of Rancho Cucamonga (City) engaged Chattel Architecture, Planning & Preservation, Inc. (Chattel Architecture) as sub-consultant to General Plan prime consultant Hogle-Ireland, Inc. to develop goals and policies for historic preservation planning to be incorporated into the City's General Plan Update. To this end, Chattel Architecture was asked to write a historic context statement and perform a reconnaissance-level historic resource survey of select properties in the City to identify potential historic resources and districts. This work culminates, in part, in this report, describing survey methodology and findings, including identification of: (1) individual properties appearing eligible for listing as historical resources at the local, state, and national levels; (2) boundaries for local Neighborhood Character Areas (NCAs); (3) properties that would contribute to proposed NCAs.

Methodology

In April 2008, City staff identified in a tour with Chattel Architecture 11 areas containing concentrations of properties constructed prior to 1965 in which to focus survey efforts (Appendix A). In addition, previous surveys had been inconclusive as to historic significance of 250 properties (some of which are located within the 11 survey areas), included in a "Historic Site List," identified as "Potential Local Landmark" (PLL), of which there were 100 properties, and "Survey Undetermined Significance" (SUS), of which there were 150 properties. Overall, Chattel Architecture evaluated in survey 432 properties in February – August 2009, while concurrently preparing the City's historic context statement. Chattel Architecture surveyed in teams of two, collecting the majority of data within a two-week period in February 2009 and collecting additional data through September 2009. While in the field, Chattel Architecture evaluated properties against the City's previous survey forms, historic maps and aerial photographs, and the draft historic context statement.

Survey data was collected in the field on a tablet computer using a FileMaker Pro database. The database was created with data fields specifically designed to describe historic resources in Rancho Cucamonga, based on the City's prevalent architectural and cultural landscape features, as well as to be consistent with California Department of Parks and Recreation survey forms. Digital photographs were taken of each property at time of survey and were noted on individual survey forms. Cultural landscape features associated with historic properties were frequently noted in survey and as survey field work progressed, it became increasingly apparent that extant historic cultural landscape features comprise a significant portion of the City's extant historical resources. As such, Chattel Architecture recommends the City undertake a comprehensive and intensive-level cultural landscape survey to fully document cultural landscape features.

Property Evaluation: Significance and Integrity

Properties reviewed in survey were evaluated in terms of the degree to which they convey *significance* and *integrity*. Properties are found to be *significant* if they fall under one or more of the four California or National Register criteria (listed above). *Integrity*, the ability of a property to convey its significance, is generally not assessed without first establishing historical significance for either an individual building or potential historic district under one of the four significance criteria. Properties are assigned an integrity level in survey (low, medium, or high) based on the degree to which the property retains the following seven "aspects of integrity": Location, Design, Setting, Materials, Workmanship, Feeling, and Association.

As described above, for a property to be eligible for listing in the California Register, it must retain several, and usually most, of its seven aspects of integrity. Despite losses, collections of historically significant buildings remain throughout Rancho Cucamonga and an aggressive preservation program has the ability to preserve the extant historic resources. Although the properties in Rancho Cucamonga largely retain integrity of *location*, integrity of *design* is compromised by significant alterations to the majority of properties.

Setting, which is defined in part as relationships between buildings and other features or open space, has to a large degree been lost in Rancho Cucamonga. The City was originally developed as three low density agricultural communities (Cucamonga, Alta Loma, and Etiwanda). Early residential buildings in these communities were either clustered in small town centers or spread out, separated from other homes by vast expanses of agricultural land, as evidenced in parcel maps showing agricultural land subdivisions in the late 1880s and aerial photographs of the City from the 1930s and 1960s. It was not until after the 1960s that the local landscape changed dramatically, with suburban tract housing developed on a grand scale within land subdivisions initially used for agriculture. The landscape shifted from one of sprawling agricultural lands peppered with houses and centered on small town centers to a much denser suburban environment. Agricultural lands that once comprised the majority of the City are almost entirely gone. While some rural landscape elements remain and town centers can still to some degree be identified by existing historic resources, historic buildings that retain their original setting are rare in Rancho Cucamonga.

Similar to design, integrity of *materials* has been significantly compromised through numerous alterations to the majority of buildings. These alterations outline the loss of *workmanship*, or evidence of artisans' labor and skill in constructing or altering a building. Because of these changes, the *feeling*, or presence of physical features that, taken together, convey the area's original character, is fading. Many of the modest residential, commercial, industrial, and institutional buildings that once characterized the City have either been demolished or significantly modified. Likewise, streetscapes are losing their ability to convey a feeling that resembles the early agricultural communities of Rancho Cucamonga.

The concept of architectural integrity can also be applied to historic districts.¹ It can be distinguished from surrounding properties and presents the same constraints and opportunities as individually listed properties. Historic districts can be designated at the national, state, and local level. Each level of designation has its own specific criteria, although the California Register and most local registers base their designation criteria on those contained in the National Register. In addition, each level of designation entails a different level of protection, triggers different levels of review, and makes the property potentially eligible for various preservation incentives. Resources listed on, or found eligible for listing on, the National Register are subject to Section 106 review whenever federal agencies are involved in a project. Resources listed, or found eligible for listing on, a local register or the California Register are subject to CEQA review, which considers effects on historic resources as part of an assessment of the potential environmental impacts of a proposed project.

Specifically applying the notion of integrity to historic districts, the National Park Service notes:

¹ The *National Register Bulletin: How to Apply National Register Criteria* (National Park Service, 2002)

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole... The number of noncontributing properties a district can contain yet still convey its sense of time and place and historical development depends on how these properties affect the district's integrity... For a district to retain integrity as a whole, the majority of the components that make up the district's historic character must possess integrity even if they are individually undistinguished.

Application of California Historical Resource Status Codes

Properties evaluated in survey were each given a status code consistent with California Historical Resource Status Codes created by the State Office of Historic Preservation. The City of Rancho Cucamonga previously surveyed properties with a unique set of status codes not consistent with State standards for evaluation of historical resources. Chattel Architecture chose to implement California Historical Resource Status Codes to make the City's historic preservation program consistent with State standards, facilitating identification of historic resources for purposes of the California Environmental Quality Act (CEQA) and determining eligibility of each property for the National Register of Historic Resources, California Register of Historic Resources (California Register), local register of historic resources, or local historic districts and/or Neighborhood Character Areas (NCAs). While Chattel Architecture has exercised its professional judgment to assign California Historical Resource Status Codes to properties, eligibility determinations made in this survey are recommendations, and do not constitute official designations to any register.

California Historical Resource Status Codes applied in survey include:

Determined eligible for listing in the National Register (NR) or the California Register (CR)

2S2 Individual property determined eligible for NR by consensus through Section 106 process. Listed in the CR.

Appears eligible for recognition as historically significant by local government

5S3 Appears individually eligible for local listing or designation through survey evaluation.

Appears eligible for National Register (NR) or California Register (CR) through survey evaluation

3CS Appears eligible for CR as an individual property through survey evaluation.

3S Appears eligible for NR as an individual property through survey evaluation.

Not eligible for listing or designation as specified

6Z Found ineligible for NR, CR or local designation through survey evaluation. Most frequently used in Rancho Cucamonga to describe: historic properties with low integrity, properties that once contained historic buildings and were found to be vacant lots, properties containing non-historic buildings.

6Q Determined ineligible for local listing or designation as a historic district through a survey process; may warrant special consideration for local planning.

6DQ Individual property identified through a survey process as a non-contributor to a potential local historic district or is located within a 6Q area/neighborhood; may

warrant special consideration for local planning. Most frequently used in Rancho Cucamonga to describe properties that do not retain sufficient integrity to be listed individually but contribute to Rancho Cucamonga Neighborhood Character Areas (Conservation Districts).

Not evaluated or needs reevaluation

7R Identified in reconnaissance level survey: Not evaluated. Most frequently used to describe historic resources that cannot be seen from the public right-of-way.

Status codes used in previous survey (unique to Rancho Cucamonga):

DEM	Demolished
DLL	Designated Local Landmark
PLL	Potential Local Landmark
PNR	Potential National Register
SDI	Survey Determined Insignificance
SUS	Survey Undetermined Significance
URM	Unreinforced Masonry

Summary of Previously Surveyed and Designated Resources

The City of Rancho Cucamonga has previously surveyed 445 properties, entered into the City's "Historic Site List," dated April 23, 2009.

The City currently has 1 property listed in the National Register of Historic Places (National Register), the John Rains House / Casa de Rancho Cucamonga (1859; currently Rains House Museum), located at 7869 Vineyard Avenue, also listed in the California Register of Historical Resources (California Register) and a Designated Local Landmark (DLL).

The City currently has 5 properties listed in the California Register, including:

1. Padre / Biane Winery, 9951 8th Street (1909)
2. Ernst Mueller House, 6563 East Avenue (date unknown)
3. James G. Isle House, 6490 Etiwanda Avenue (date unknown)
4. Herbert Goerlitz House, 6558 Hermosa / 9893 Highland Avenue (1926)
5. John Rains House, 7869 Vineyard Ave (1859) – Note: received "1S" 1973; received "3" 1988; received "7K" 1991

In addition, the City has 2 California Historical Landmarks and 6 California Points of Historical Interest. Note: The State no longer designates Historical Landmarks or Points of Historical Interest. Properties previously designated as such must be reevaluated to be included in the California Register and may not constitute historical resources for purposes of evaluation under the California Environmental Quality Act (CEQA).

California Historical Landmarks:

1. Cucamonga Rancho Winery / Thomas Vineyards, 8916 Foothill Boulevard (1839) Note: Property is also a DLL (California Historical Landmark No. 490)
2. Site of Tapia Adobe, Top of Red Hill, approximately 8501 Red Hill Country Club Drive (1839) (California Historical Landmark No. 360), demolished. Note: Property is also a local Designated Point of Interest (DPI).

California Points of Historical Interest:

1. Baseline Road, Highway from Highland to Claremont (c. 1853) (Point of Historical Interest No. SBR-012)
2. Cucamonga Chinatown Site, San Bernardino Road (1920) (Point of Historical Interest No. SBR-077)
3. Christmas House, 9240 Archibald Avenue (1904) (Point of Historical Interest No. SBR-073) Note: Property is also a DLL.
4. Garcia Ranch House, 7150 Etiwanda Avenue (1874) (Point of Historical Interest No. SBR-082) Note: Property is also a DLL.
5. Sycamore Inn (Uncle Billy's Tavern), 8318 Foothill Boulevard (1848) (Point of Historical Interest No. SBR-070) Note: Property is also a DPI.
6. Milliken Ranch, 8798 Haven Avenue (1891) (Point of Historical Interest No. SBR-075) Note: Property is also a DPI.

According to the City's "Historic Site List," the City currently has 82 Designated Local Landmarks (DLLs) and 49 Designated Points of Interest (DPI), 30 of which have been demolished. In addition, the City identified: 8 properties potentially eligible for National Register Listing, identified as Potential National Register (PNRs), 115 properties as Potential Local Landmarks (PLLs), of which 3 have been demolished, 24 properties determined insignificant, given the code Survey Determined Insignificant (SDI) and 154 properties assigned the code Survey Undetermined Significance (SUS).

According to the San Bernardino County Historic Property Data File, dated December 3, 2007 (Appendix C), the City has 19 properties previously surveyed as eligible for National Register listing (California Historical Resource Status Code 3S); 2 properties previously surveyed as eligible for National Register listing both individually and as a contributor to a National Register-eligible district through survey evaluation (California Historical Resource Status Code 3B); and 1 property that appears eligible for National Register-listing as a contributor to a National Register-eligible district through survey evaluation (Willows School, 8969 Archibald Avenue; California Historical Resource Status Code 3D). In addition, the City has 21 properties previously surveyed as eligible for local listing or designation (California Historical Resource Status Code 5S2).

Findings

Chattel Architecture's 2009 survey evaluated 432 properties, 210 of which retained sufficient integrity to warrant a description, for which Chattel Architecture completed survey forms (results attached in Appendix B). 17 properties were not visible from the public right-of-way and were not evaluated. The most common changes to the City's previous designations include (in no particular order):

- New determination of eligibility due to a property not having previous been surveyed.
- New determination of eligibility due to passage of time. The National Register has an arbitrary 50-year cut-off for listing, i.e. no properties constructed within the past 50 years may be listed, except under special circumstances. As a result, the previous survey may not have evaluated buildings constructed after approximately 1949 and would not have treated post-World War II architecture and tract housing as potential historic resources.
- Change in eligibility due to alteration or demolition of historic resources.

- Change in eligibility due to new information reflected in historic context.

National Register Eligibility

4 properties appear individually eligible for listing in the National Register, receiving a California Historical Resource Status Code 3S. These resources would also be eligible for listing in the California Register as well as for local designation, if not already listed or designated:

1. Sam and Alfreda Maloof Compound, 5131 Carnelian Street (As the Compound was moved from its original site at 9553 Highland Avenue, prior listing in California Register is being reevaluated; National Register nomination is currently being prepared for receiver site)
2. Demens-Tolstoy House, 9686 Hillside Road, apn: 106156104 (Chattel Architecture's 2009 survey reconfirms previous identification of National Register eligibility)
3. Cucamonga Rooming House, 9680 San Bernardino Road, apn: 20813109 (Chattel Architecture's 2009 survey reconfirms previous identification of National Register eligibility)
4. China House, 9151 San Bernardino Road, apn: 20815124 (Chattel Architecture's 2009 survey reconfirms previous identification of National Register eligibility)

California Register eligibility

9 properties appear individually eligible for listing in the California Register, receiving a California Historical Resource Status Code 3CS. These resources would also be eligible for designation as local landmarks and include the following:

1. Stone House, 10270 Church Street, apn: 107727103
2. Sanchez Home and Winery, 7402 Hermosa Avenue, apn: 107703105
3. Jones House, 13232 Victoria Avenue, apn: 22706171
4. Mandala Winery, 10277 Foothill Boulevard, apn: 20833123
5. Sweeten Hall (formerly Cucamonga Public School), 9324 San Bernardino Road, apn: 20811109
6. Scott House, 8555 Grove Avenue, apn: 20722203
7. 8619 Baker Avenue (name unknown) apn: 20713253
8. Willows School, 8968 Archibald Avenue, apn: 20917115

Local Register eligibility

There are 113 properties that appear individually eligible for local designation, receiving a California Historical Resource Status Code 5S3 (see attached spreadsheet).

281 properties of those surveyed were found ineligible for the National Register, California Register, or for designation as local historic landmarks (CHR status codes 6Z, 6Q, 6DQ, and 6L). These properties are not considered historical resources under CEQA. However, 78 6DQ properties and 2 6Q properties were identified and may warrant special consideration in local planning efforts as contributors to Neighborhood Character Areas (NCAs).

Historic District and Neighborhood Character Area eligibility

While the City does not appear to have any potential historic districts that would be eligible at the local state or national levels, there appear to be 8 NCAs located in the historic town centers of Cucamonga, Alta Loma and Etiwanda, as well as in the historically Latino community of North Town, the historic residential neighborhood located on Red Hill, the Bear Gulch area of Foothill Boulevard / Route 66 and in two early postwar tract housing developments, Cucamonga

Vineyard Tract Subdivision B, Tract No. 5576 (Hellman Ave, San Bernardino Rd, Harvard St, Montara Ave, Selma Ave) and Tracts No's. 5592, 5593, and 8892 (Effen St, Dorset St, Stafford St, Hermosa Ave, Center Ave, Ashford St, Norwick St, and Kinlock Ave). Each NCA received a California Historical Resource Status Code of "6Q," with contributing resources located within the NCA receiving status code of at least "6DQ." Non-contributing resources receive a status code of "6Z." Each NCA is fully described in the attached California Department of Parks and Recreation (DPR) 523d district record forms (Appendix D). Proposed NCAs do not constitute historic districts for purposes of State identification.

Regulatory Setting

Federal

National Register of Historic Places (National Register)

The National Register is the nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, as amended, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect the country's historic and archaeological resources. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Register is administered by the National Park Service (NPS). Currently there are more than 75,000 listings that make up the National Register, including all historic areas in the National Park System, over 2,300 National Historic Landmarks, and properties which have been listed because they are significant to the nation, a state or a community.²

As stated in 36 Code of Federal Regulations (CFR) §60.4, in order to be considered for listing in the National Register, a resource must meet the criteria for evaluation:

The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

The National Register includes only those properties that retain sufficient integrity to accurately convey their physical and visual appearance during their identified period of significance. Integrity is defined in the National Register program as a property's ability to convey its significance. Evaluation of integrity is founded on "an understanding of a property's physical

² <<http://www.cr.nps.gov/places.htm>>

features and how they relate to its significance.”³ While integrity is important in evaluating and determining significance, a property’s physical condition, whether it is in a deteriorated or pristine state, has relatively little influence on its significance. A property that is in good condition may lack the requisite level of integrity to convey its significance due to alterations or other factors. Likewise, a property in extremely poor condition may still retain substantial integrity from its period of significance and clearly convey its significance.

Secretary of the Interior’s Standards for Treatment of Historic Properties

The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Secretary’s Standards, Weeks and Grimmer, 1995), are promulgated pursuant to the National Historic Preservation Act, 16 U.S.C. 470 et seq. and provide general guidance on treatments for historical resources and their immediate surroundings or setting. The Secretary’s Standards are not prescriptive or technical, but “are intended to promote responsible preservation practices” and “provide philosophical consistency” to treatments for historical resources (NPS, 2003). NPS identifies four treatment approaches, which include preservation, rehabilitation, restoration and reconstruction. These treatments, in hierarchical order, are defined as follows:

The first treatment, **Preservation**, places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a building’s continuum over time, through successive occupancies, and the respectful changes and alterations that are made.

Rehabilitation, the second treatment, emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work. (Both Preservation and Rehabilitation standards focus attention on the preservation of those materials, features, finishes, spaces, and spatial relationships that, together, give a property its historic character.)

Restoration, the third treatment, focuses on the retention of materials from the most significant time in a property’s history, while permitting the removal of materials from other periods.

Reconstruction, the fourth treatment, establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.⁴

State

California Register of Historical Resources (California Register)

The California Register is a state version of the National Register of Historic Places program. The California Register of Historical Resources was enacted in 1992, and became official January 1, 1998.

The California Register was established to serve as an authoritative guide to the state’s significant historical and archaeological resources (California Public Resources Code (PRC))

³ National Park Service, Department of the Interior *How to Apply the National Register Criteria for Evaluation* (Washington, DC 1998) 44.

⁴ <http://www2.cr.nps.gov/tps/standguide/overview/choose_treat.htm>

§5024.1). State law provides that in order for a property to be considered eligible for listing in the California Register, it must be found by the State Historical Resources Commission to be significant under any of the following four criteria (which parallel National Register criteria):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

California Register regulations contained in Title 14, Chapter 11.5 provide in §4852 (c) that "it is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register." OHP has consistently interpreted this to mean that a California Register-eligible property must retain "substantial" integrity. Because California Register regulations do not provide substantial written guidance on evaluating integrity, the National Register bulletin, *How to Apply the National Register Criteria for Evaluation*, is used.

The California Register also includes properties which: have been formally *determined eligible for listing in*, or are *listed in* the National Register; are registered State Historical Landmark Number 770, and all consecutively numbered landmarks above Number 770; are points of historical interest, which have been reviewed and recommended to the State Historical Resources Commission for listing; and are city and county-designated landmarks or districts (if criteria for designation are determined by OHP to be consistent with California Register criteria).

California Environmental Quality Act (CEQA)

The purpose of CEQA is to evaluate whether a proposed project may have an adverse effect on the environment and, if so, if that effect can be reduced or eliminated by pursuing an alternative course of action or through mitigation. *Guidelines for California Quality Act (CEQA Guidelines)* are the regulations that govern the implementation of CEQA. CEQA Guidelines are codified in the California Code of Regulations (CCR), Title 14, Chapter 3, § 15000 et seq. and are binding on state and local public agencies. The basic goal of CEQA is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for California's public agencies to:

1. Identify the significant environmental effects of their actions; and, either
2. Avoid those significant environmental effects, where feasible; or
3. Mitigate those significant environmental effects, where feasible.⁵

CEQA Statutes at §21084.1 define an historical resource as:

a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the

⁵ <http://ohp.parks.ca.gov/default.asp?page_id=21721>

resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource.

CEQA Guidelines at §15064.5(a)(3) also provides additional guidance on this subject:

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded or may be likely to yield, information important in prehistory or history.

Generally, CEQA utilizes the *Secretary's Standards* as a means of evaluating when proposed projects might be found to have less than significant impacts on historical resources.

California Historical Resources Status Codes

The Office of Historic Preservation created status codes in 1975 as a tool to classify historical resources. Status codes were created to "serve as a starting place for further consideration and evaluations."⁶

Broad categories of California Historical Resource Status Codes are defined as:

1. Properties listed in the National Register (NR) or the California Register (CR)
2. Properties determined eligible for listing in the National Register (NR) or the California Register (CR)
3. Appears eligible for National Register (NR) or California Register (CR) through Survey Evaluation
4. Appears eligible for National Register (NR) or California Register (CR) through other evaluation
5. Properties Recognized as Historically Significant by Local Government
6. Not Eligible for Listing or Designation as specified
7. Not Evaluated for National Register (NR) or California Register (CR) or Needs Reevaluation [sic]

⁶ California State Office of Historic Preservation, *Technical Assistance Bulletin #8: User's Guide to the California Historical Resource Status Codes & Historic Resources Inventory Directory*, November 2004, 5. This publication is available on the website: <http://ohp.parks.ca.gov/pages/1069/files/tab8.pdf>.

These categories are divided into more descriptive and specific subcategories. In August 2003, the State Historic Preservation Officer revised the status codes to include CRHR eligibility with National Register eligibility. Over the next several months, status codes were revised two subsequent times. Although status codes of previously evaluated properties were reclassified and established status codes changed definitions, the initial status code of 1-5, the one assigned to a property prior to revision in 2003, retained relevance for CEQA purposes.⁷ The operative list of California Historical Resources Status issued by OHP is dated December 8, 2003 available online at http://ohp.parks.ca.gov/?page_id=1069.

Two of the most notable changes included status code 4 and 5S3/5D3. 4s were formerly assigned through surveys to properties that had the potential, if some circumstance or event was to happen in the future, to become eligible for the National Register. While they were not eligible for listing in the National Register, they still had presumptive significance under CEQA. Properties that previously had a status code of 4 were changed to a status code of 7. Currently, a status code of 4 generally denotes state-owned properties. Formerly, status codes 5S3 and 5D3 were used to identify properties that were not eligible for the California Register, National Register or local listing but warranted special consideration in local planning. These properties became a 6L, "*Determined ineligible for local listing or designation through local government review process; may warrant special consideration in local planning.*" Status codes 6Q and 6DQ are used to identify properties that do not retain sufficient architectural integrity for listing on any level but may still warrant special consideration in local planning, possibly as contributors to conservation districts (neighborhood character areas) or individually. Consistent with Public Resources Code §5024.1 subdivision g, "A resource identified as significant in an historic resource survey may be listed in the California Register if the survey meets all of the following criteria:

- The survey has been or will be included in the State Historical Resource Inventory.
- The survey and the survey documentation were prepared in accordance with [OHP] procedures and requirements.⁸
- The resource is evaluated and determined by the [OHP] to have a significance rating of Category 1-5 on [Department of Parks and Recreation] form 523.
- If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Local

The City's existing historic resource survey is added to on an as-needed basis, but is not comprehensive. The City is currently in the process of updating its Historic Preservation Ordinance, originally adopted May 1993, to be consistent with state and national preservation standards and also maintains a local register of historic resources, called the "Designated and Potential Historic Site List," although it does not maintain a local inventory of historic resources. It is recommended that the City's existing historic resource survey efforts, local inventory of historic resources, and local register of historic resources be clearly identified, distinguished

⁷ California State Office of Historic Preservation, *Technical Assistance Bulletin #8: User's Guide to the California Historical Resource Status Codes & Historic Resources Inventory Directory*, November 2004, 7.

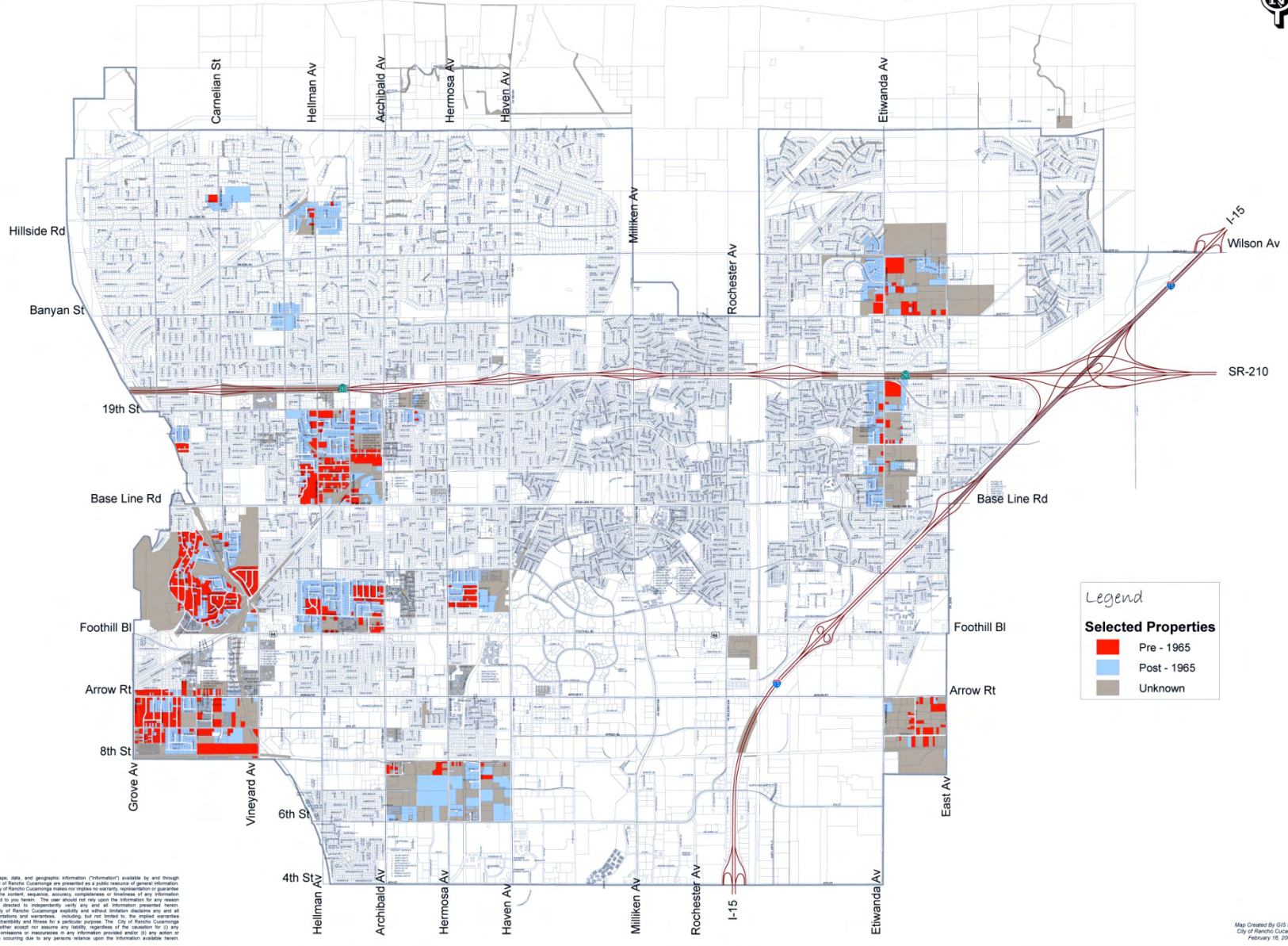
⁸ OHP procedures and requirements include that only intensive level surveys are definitive in evaluating significance.

from one another, and updated over time, as described in Chattel Architecture's Issues, Goals and Policies paper, submitted to the City and dated August 17, 2009.

Attachments

Appendix A:
Map of Survey Areas
(Prepared by City of Rancho Cucamonga)

Structures Built Before 1965 for Selected Properties



The maps, data, and geographic information ("information") available by and through the City of Rancho Cucamonge are presented as a public resource of general information. The City of Rancho Cucamonge makes no explicit warranty, representation or guarantee as to the content, sequence, accuracy, completeness, or timeliness of any information provided to you herein. The user should not rely upon the information for any search and is advised to independently verify any and all information presented herein. The City of Rancho Cucamonge expressly and without limitation disclaims any and all warranties and representations, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The City of Rancho Cucamonge shall neither accept nor assume any liability, regardless of the occasion for, or any errors, omissions or inaccuracies in any information provided and/or (i) any action or inaction occurring due to any person reliance upon the information available herein.

Map Created By GIS Division
City of Rancho Cucamonge
February 16, 2009

Appendix B:
Spreadsheet of Chattel Architecture's 2009 Survey Findings

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
2S2: Individual property determined eligible for NR by consensus through Section 106 process. Listed in the CR.						
9985 / 9951 / 10037	8th St	20920119 / 20920120 / 20920118	Biane Winery, formerly Padre Winery	c. 1909; remodeled 1930	2S2	PLL; 2S2
3S: Appears eligible for NR as an individual property through survey evaluation.						
9680	San Bernardino Rd	20813109	Cucamonga Rooming House	1900	3S	PLL; 3S
8581	San Bernardino Rd	20815124	China House (on former Chinatown site)	c. 1919	3S	3S
9686	Hillside Rd	106156104	Demens-Tolstoy House	1890	3S	DLL; 3S
5131	Carnelian Street		Sam and Alfreda Maloof Compound	1956, moved 2000	3S	2S2; 7W
3CS: Appears eligible for CR as an individual property through survey evaluation.						
8619	Baker Ave	20713253	Stone House	1916	3CS	PLL
8555	Grove Ave	20722203	Scott House	ca. 1930	3CS	PLL
9324	San Bernardino Rd	20811109	Sweeten Hall	1940	3CS	DLL
10277	Foothill Bl	20833123	Mandala Winery	1915 est.	3CS	PLL
8968	Archibald Ave	20917115	Willows School	1916	3CS	PLL; 3D
13232	Victoria Ave	22706171	Jones House	1911	3CS	PLL
7402	Hermosa Ave	107703105	Sanchez Home and Winery	1912	3CS	PLL
10270	Church St	107727103	Stone House		3CS	SUS
7601	Archibald Ave	107732112	Billings House	1916 est.	3CS	SUS
5S1: Individual property that is listed or designated locally.						
9385	Lomita Dr	20208234	Charles E. Smith House	1931	5S1	
8068	Archibald Ave	20815301	nosenzo-smiderle house	1930	5S1	
9670	Foothill Bl	20815305	Richfield Oil Station (Route 66)	1915 est.	5S1	PLL; 3S
6878	Etiwanda Ave	108951108		1940	5S1	
5S3: Appears individually eligible for local listing or designation through survey evaluation.						
5917	Archibald Ave	20115215	Krysto Ranch House (Krystopovich-Vai)	1916 est.	5S3	PLL
5651	Archibald Ave	20183102			5S3	SUS
7026	Amethyst Ave	20207111	Blake	1928	5S3	PLL
9496	La Vine St	20207113	Krysto	1927	5S3	PLL
9436	La Grande St	20207233	Dixon House	1928	5S3	SUS
7084	Amethyst Ave	20207252	Clayton	1937 est.	5S3	SUS
9468	Lomita Dr	20208115		1920	5S3	

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
9317	La Grande St	20208129		1948	5S3	SUS
9309	Lomita Dr	20208201		1929	5S3	SUS
9367	Lomita Dr	20208205		1928 est.	5S3	SUS
9409	Lomita Dr	20208210		1927 est.	5S3	SUS
9408	La Mesa Dr	20208221	W. Ledig House	1928	5S3	PLL
9393	Lomita Dr	20208230	Derfer House	1928	5S3	PLL
9359	Lomita Dr	20208231		1935 est.	5S3	SUS
6865	Amethyst Ave	20212102		1938	5S3	SUS
9516	Monte Vista St	20213105		1922	5S3	
9627	Monte Vista St	20213140	Dahlstrom	1920	5S3	PLL
9603	Monte Vista St	20213143		1965	5S3	
9593	Monte Vista St	20213144	Williams	1927	5S3	PLL
6931	Amethyst Ave	20213174		1925 est.	5S3	SUS
7147	Amethyst Ave	20215103		1915	5S3	
7235	Amethyst Ave	20216101	Roberd/Dishman/Klusman	1923	5S3	PLL
7209	Amethyst Ave	20216103	Roberts House	1918	5S3	PLL
9540	Roberds Court	20216105	Roberds Court House II	1922-24	5S3	PLL
9548	Roberds Court	20216105	Roberds Court House I	1922-24	5S3	PLL
7271	Amethyst Ave	20216111	Bennett	1923	5S3	PLL
7263	Amethyst Ave	20216112	Davison/Scoville House	1926	5S3	PLL
7251	Amethyst Ave	20216113	Wangler	1919	5S3	PLL
10295	19th St	20220135		1930s est.	5S3	SUS
10213	19th St	20220139	Powelson-Beckley House	1932-33 est.	5S3	PLL
8442	Camino Sur	20706118	Topliff	1932 est.	5S3	SUS
8456	Camino Sur	20706207			5S3	SUS
7839	Calle Casino	20707112		1948	5S3	SUS
8373	Camino Sur	20707201		1946	5S3	PLL
7862	Alta Cuesta Dr	20707208		1952	5S3	SUS
7895	Calle Casino	20707211		1935	5S3	PLL
7894	Valle Vista Dr	20708122		1942	5S3	SUS
7850	Valle Vista Dr	20708131	Smith House	1931	5S3	PLL
7897	Valle Vista Dr	20708214	Castellini	1935 est.	5S3	SUS
8161	Foothill Bl	20711311	Foothill Liquor (John & Lucia Nosenzo)	1945 est.	5S3	SUS
8186	Arrow Rte	20717128		1936	5S3	SUS
8681	Grove Ave	20723101		1925	5S3	SUS
8151	9th St	20724115		1937	5S3	SUS
8734	Calaveras Ave	20724116	Ynostroza House	1936 est.	5S3	SUS

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
8725	Grove Ave	20724130	Rancho Cucamonga	est. 1925	5S3	PLL
8764	Sierra Madre Ave	20724317		1948	5S3	SUS
8649	9th St	20726218	Cask and Cleaver	1945	5S3	PLL
8783	Arrow Rte	20726221		1928 or 29	5S3	PLL
8607	9th St	20727119		1905 Est.	5S3	SUS
8810	Vineyard Ave	20727123		est. 1930	5S3	SUS
8725	9th St	20727128		1925	5S3	SUS
8847	9th St	20727149	warehouse for cannery	1940	5S3	SUS
8213	Arrow Rte	20734213 / 20734246	Eckman House	1926	5S3	PLL
8308	9th St	20738110	Winter-Brubaker House	1913 Est.	5S3	PLL; 5S2
9398	San Bernardino Rd	20811118		1927 est.	5S3	SUS
9346	San Bernardino Rd	20811125		1915	5S3	
9666	San Bernardino Rd	20813110	Rahn-Whiting House	pre 1913	5S3	PLL
9658	San Bernardino Rd	20813111	Noell-Blankenship	pre 1913	5S3	PLL
9650	San Bernardino Rd	20813112		1916	5S3	
9638	San Bernardino Rd	20813113	Noell House	1913 Est.	5S3	PLL
8001	Hellman Ave	20814141		1940	5S3	SUS
9612	Foothill Bl	20815312	Tapparo	1935-1940 est.	5S3	PLL
9605	Estacia Ct	20815314	George Klusman	1926 est.	5S3	SUS
9611	Estacia Ct	20815315	George Klusman	1925/26	5S3	SUS
9619	Estacia Ct	20815316		1927 est.	5S3	SUS
9627	Estacia Ct	20815317			5S3	SUS
7508	Hellman Ave	20816228	Vaughn House	1924 est.	5S3	SUS
8405	Vineyard Ave	20825112			5S3	SUS
8204	Archibald Ave	20837714	Jamison House	1926	5S3	PLL; 5S2
9498	San Bernardino Rd	20852301	Brand House	1916 est.	5S3	SUS
8847	Archibald Ave	20906122	La Paloma Market	1915	5S3	PLL
9797	Feron Bl	20906128	Iglesia Del Nazareno (Nazarene Church)	1920 est.	5S3	PLL
8987	Archibald Ave	20919101		1915	5S3	
9747	8th St	20919109	Danner's Market	1915 Est.	5S3	PLL; 6Y
8933	Belmont Ave	20919206		1925	5S3	
10079	8th St	20920104	Lady of Mt Carmel Church	1916 Est.	5S3	SUS
8925	Center Ave	20924107		1930	5S3	SUS
12966	23rd St	22512216		1924	5S3	
13284	Banyan St	22512284		1934	5S3	
6261	East Ave	22519128	Etiwanda Dairy	1888 est.	5S3	SUS

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
6293	Etiwanda Ave	22520130	John Scott	1932 est.	5S3	PLL
6892	Etiwanda Ave	22704110	Frost	1918 est	5S3	PLL
6898	Etiwanda Ave	22704117	Frost		5S3	PLL
12996	Victoria Ave	22706164	John Frost	1915 est.	5S3	PLL
6956	Etiwanda Ave	22710108	Pearson	1921 est.	5S3	PLL
7082	East Ave	22712124	Millick/Frost	1936 est.	5S3	PLL
13325	Victoria Ave	22714129	Fultz House		5S3	PLL
13483	Victoria Ave	22714143	Meyers	1915 est.	5S3	PLL
12583	Highland Ave	22741175	Etiwanda Road House / Casaletti's Polka Palace	1926 est.	5S3	PLL
6658	Etiwanda Ave	22748123	Price House	1893	5S3	PLL
5968	Hellman Ave	106222103	Wally Grass House	1931 est.	5S3	SUS
6167	Hellman Ave	106239101		1915 est.	5S3	PLL
9926	Hillside Rd	107419101	Cherbak	1916 est.	5S3	PLL
5510	Hermosa Ave	107421133		1916 est.	5S3	PLL
6958	Filkins	107625136	Unknown	Approx 1910	5S3	PLL
7609	Hermosa Ave	107728144	Kincaid House	1895	5S3	PLL
7671	Archibald Ave	107732106	Forster	1916 est.	5S3	SUS
7639	Archibald Ave	107732109	Rehm	1916 est.	5S3	SUS
7613	Archibald Ave	107732111		1916 est.	5S3	SUS
7050	Etiwanda Ave	108907124		1938	5S3	
9664	Estacia Ct	20815214			5S3	
9648	Estacia Ct	20815206			5S3	
9677	Archibald Ave				5S3	
7251	Amethyst Ave	20216147			5S3	
	Madrone Ave	20726257	Russian Village	est. 1920s	5S3	Not previously surveyed
6048	Hellman Ave	106227101	Harry Ledig House	1932 est.	5S3	SUS
10247	Wilson Ave				5S3	
13008	Banyan St / Summit Ave		Stephens House		5S3	
6688	Etiwanda Ave				5S3	
6962	East Ave				5S3	
10147	8th St	20922105		ca. 1935	5S3	
11921	Foothill (SE Corner Foothill and Rochester)				5S3	

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
6DQ: Individual property identified through a survey process as a non-contributor to a potential local historic district or is located within a 6Q area/neighborhood; may warrant special consideration for local planning.						
9358	La Vine St	20207102	Perdew	1931	6DQ	PLL
9378	La Vine St	20207103	Schmutz	1940	6DQ	SUS
9392	La Vine St	20207105		1937 est.	6DQ	SUS
9316	La Grande St	20207201		1955	6DQ	
9311	La Vine St (7033 Hellman)	20207203 / 20207122		1934	6DQ	SUS
9339	La Vine St	20207205		1948	6DQ	SUS
9347	La Vine St	20207206		1930	6DQ	SUS
9403	La Vine St	20207212	Bradshaw House	1928	6DQ	PLL
9413	La Vine St	20207213	Casterline/Aeschlimann House	1928	6DQ	PLL
9421	La Vine St	20207214	Hamms House	1928	6DQ	PLL
9429	La Vine St	20207215	Wilson House	1929 est.	6DQ	SUS
9437	La Vine St	20207216	Wylie House	1928	6DQ	PLL
9445	La Vine St	20207217	Bauer House	1928	6DQ	PLL
9461	La Vine St	20207219		1928	6DQ	SUS
9469	La Vine St	20207220	Clayton	1928	6DQ	SUS
7090	Amethyst Ave	20207226	McCandless	1928	6DQ	PLL
9470	La Grande St	20207229		1941 est.	6DQ	SUS
9452	La Grande St	20207231		1961	6DQ	
9428	La Grande St	20207234	Schmutz	1928	6DQ	SUS
9420	La Grande St	20207235	Lawyer	1928	6DQ	PLL
9412	La Grande St	20207236		1929 est.	6DQ	SUS
9404	La Grande St	20207237	Rupp/Dixon House	1928	6DQ	PLL
9350	La Grande St	20207244		1949	6DQ	SUS
9328	La Grande St	20207246	Page House	1966 est	6DQ	PLL
9390	La Grande St	20207251		1946	6DQ	
9387	La Grande St	20208108		1940	6DQ	SUS
7126	Amethyst Ave	20208118	Clayton Service Station	1934	6DQ	SUS
9356	Lomita Dr	20208124	Galbraith	1928	6DQ	PLL
9350	Lomita Dr	20208125		1927 est.	6DQ	SUS
7112	Amethyst Ave	20208143	Stoebe House	1917	6DQ	PLL
9423	Lomita Dr	20208212		1929 est.	6DQ	SUS
9448	La Mesa Dr	20208214		1929	6DQ	PLL
9438	La Mesa Dr	20208215		1936	6DQ	PLL

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
9416	La Mesa Dr	20208220	McKee	1927	6DQ	PLL
9343	Lomita Dr	20208227			6DQ	SUS
9489	Lomita Dr	20208304		1926	6DQ	SUS
9477	Lomita Dr	20208316		1926	6DQ	SUS
7250	Amethyst Ave	20209107	Voth	1926	6DQ	PLL
9403	La Mesa Dr	20209133		1944	6DQ	SUS
9421	La Mesa Dr	20209136		ca. 1928	6DQ	SUS
7266	Amethyst Ave	20209203	Eckenrode	1926	6DQ	PLL
7276	Amethyst Ave	20209204	Allen	1925	6DQ	PLL
6897	Amethyst Ave	20212101		1930	6DQ	SUS
9516	Monte Vista St	20213105	Patterson	1916	6DQ	SUS
9548	Monte Vista St	20213109	Perdew	1925	6DQ	PLL
9602	Monte Vista St	20213113		1946	6DQ	SUS
9610	Monte Vista St	20213114		1945	6DQ	SUS
9626	Monte Vista St	20213116	Carrari	1916	6DQ	SUS
9634	Monte Vista St	20213117		1928	6DQ	SUS
9658	Monte Vista St	20213120	Helmer/School	1915	6DQ	PLL
9674	Monte Vista St	20213122	Ulmer/Burlack	1935	6DQ	SUS
9680	Monte Vista St	20213123	Burlack	1919 est.	6DQ	SUS
9688	Monte Vista St	20213124		1921	6DQ	SUS
9699	Monte Vista St	20213131	Laborde	1916	6DQ	SUS
9687	Monte Vista St	20213132		1925	6DQ	SUS
9681	Monte Vista St	20213133		1926	6DQ	SUS
9665	Monte Vista St	20213135	Bradford	1924	6DQ	PLL
9659	Monte Vista St	20213136	Gallo	1921	6DQ	SUS
9641	Monte Vista St	20213138	Carranza	1921	6DQ	SUS
9633	Monte Vista St	20213139	Sarzotti	1936	6DQ	SUS
9611	Monte Vista St	20213142	Colins	1924	6DQ	SUS
9587	Monte Vista St	20213145	Ward	1918	6DQ	SUS
9579	Monte Vista St	20213146	Cherymisin	1926	6DQ	PLL
9571	Monte Vista St	20213147	Rabbitry	1934	6DQ	PLL
9563	Monte Vista St	20213148		1924	6DQ	SUS
9547	Monte Vista St	20213150	Ramsell	1916	6DQ	SUS
9539	Monte Vista St	20213151	Ramsell	1928	6DQ	SUS
6989	Amethyst Ave	20213155		1933 est.	6DQ	SUS
9564	Monte Vista St	20213170	Ewan	1924	6DQ	SUS
9392	Lomita Dr	20218239	George Klusman	1928 est.	6DQ	SUS
9323	San Bernardino Rd	20814141		est. 1930s	6DQ	SUS

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
9645	Estacia Ct	20815319	Wentworth	1929 est.	6DQ	SUS
9657	Estacia Ct	20815321		1912	6DQ	SUS
9739	8th St	20919108		1921	6DQ	SUS
6765	Etiwanda Ave	22706114		1949	6DQ	
7009	Etiwanda Ave	22712148	Spense House	1923 est.	6DQ	PLL
6770	Etiwanda Ave	108950102		1935	6DQ	
6862	Etiwanda Ave	108951107		1940	6DQ	
8889	Archibald Ave		Owen Electric		6DQ	Not previously surveyed
6Q: Determined ineligible for local listing or designation as a historic district through a survey process; may warrant special consideration						
9332	19th St	20147409		1930 est.	6Q	SUS
9389	San Bernardino Rd	20814130		1936	6Q	
6Z: Found ineligible for NR, CR or local designation through survey evaluation.						
6097	Archibald Ave	20125125	Perdew-Van Fleet	1935 est.	6Z	SUS
9757	Liberty	20125156	Perdew	1919 est.	6Z	SUS
6422	Haven Ave	20126230		1924 est.	6Z	SUS
6714	Amethyst Ave	20206115		1924 est.	6Z	SUS
9446	La Grande St	20207232		1925	6Z	
9382	La Grande St	20207240		1923	6Z	
9374	La Grande St	20207241		1946	6Z	
9396	La Grande St	20207247		1953	6Z	
7087	Hellman Ave	20207253		1954	6Z	
7091	Hellman Ave	20207254		1953	6Z	
9349	La Grande St	20208104		1948	6Z	
9355	La Grande St	20208105		1949	6Z	
9367	La Grande St	20208106		1949	6Z	
9377	La Grande St	20208107		1950	6Z	
9415	La Grande St	20208111		1950	6Z	
9475	La Grande St	20208116		1960	6Z	
9382	Lomita Dr	20208123		1951	6Z	
9338	Lomita Dr	20208126		1928	6Z	
9328	Lomita Dr	20208127		1950	6Z	
9318	Lomita Dr	20208128		1948	6Z	
9321	La Grande St	20208130		1953	6Z	
9431	La Grande St	20208137		1956	6Z	
9430	Lomita Dr	20208140	Wilson House	1928 est.	6Z	SUS
9420	Lomita Dr	20208141		1956	6Z	
9410	Lomita Dr	20208148		1948	6Z	

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
9375	Lomita Dr	20208206		1950	6Z	
9397	Lomita Dr	20208209		1921	6Z	
9417	Lomita Dr	20208211		1949	6Z	
9441	Lomita Dr	20208213		1934	6Z	
9376	La Mesa Dr	20208223		1960	6Z	
9353	Lomita Dr	20208226	Dishman	1937 est.	6Z	SUS
9333	Lomita Dr	20208228	Dishman	1937 est.	6Z	SUS
9323	Lomita Dr	20208235		1951	6Z	
9453	Lomita Dr	20208315		1954	6Z	
9309	La Mesa Dr	20209126		1950	6Z	
9339	La Mesa Dr	20209132		1963	6Z	
6953	Amethyst Ave	20213103		1922	6Z	
9522	Monte Vista St	20213106		1955	6Z	
9532	Monte Vista St	20213107		1965	6Z	
9540	Monte Vista St	20213108		1962	6Z	
9618	Monte Vista St	20213115		1951	6Z	
9656	Monte Vista St	20213121		1962	6Z	
9698	Monte Vista St	20213125		1927	6Z	
9651	Monte Vista St	20213137		1959	6Z	
9617	Monte Vista St	20213141		1912	6Z	
9555	Monte Vista St	20213149		1953	6Z	
9582	Monte Vista St	20213158		1959	6Z	
9584	Monte Vista St	20213159		1943	6Z	
9642	Monte Vista St	20213160		1943	6Z	SUS
9511	Monte Vista St	20213167		1948	6Z	
9529	Monte Vista St	20213168		1957	6Z	
9531	Monte Vista St	20213169		1954	6Z	
7145	Amethyst Ave	20215113	Billings Store	1921	6Z	PLL
7074	Ramona	20218109		1915 est.	6Z	SUS
7124	Ramona	20218118	Wagner	1915 est.	6Z	PLL
10223	19th St	20220140		est. 1950	6Z	PLL
8370	Camino Sur	20705315		1938	6Z	SUS
7838	Alta Cuesta Dr	20707206		1935	6Z	SUS
7873	Buena Vista Dr	20707212		1946	6Z	PLL
7859	Valle Vista Dr	20708142			6Z	SUS
8010	Vineyard Ave	20710205			6Z	SUS
7980	Vineyard Ave	20710209	Thomas House	1926	6Z	PLL/DEM

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
8291	Foothill Bl	20711324	Possible Richfield Service Station	Unknown	6Z	Survey Needed
8275	Via Carillo	20716131			6Z	SUS
8462	Edwin St	20718135		1958	6Z	6Z
8556	Arrow Rte	20720103		1946	6Z	
8588	Arrow Rte	20720106		1949	6Z	
8598	Arrow Rte	20720107		1949	6Z	
8307	Arrow Rte	20722208		1917 est.	6Z	SUS
8581	Grove Ave	20722201		1954	6Z	SUS
8193	9th St	20724211	Morales House	1928 Est.	6Z	SUS
8754	Sierra Madre Ave	20724316		1950	6Z	SUS
8745	Sierra Madre Ave	20724406		1940 Est.	6Z	PLL
8733	Sierra Madre Ave	20724407	Milliken House	1932 est.	6Z	PLL
8551	Madrone Ave	20726203		1946	6Z	SUS
8535	Madrone Ave	20726204		1946	6Z	
8643	Arrow Rte	20726238		1946	6Z	
8653	Arrow Rte	20726239		1959	6Z	
8735	Baker Ave	20727105		1952	6Z	
8723	Baker Ave	20727106		1952	6Z	
8719	Baker Ave	20727107		1954	6Z	
8521	9th St	20727108		1952	6Z	
8880	8th St	20727133	Stevie Dee's Cafe and Bertino Auto Service	1961	6Z	
8817	Baker Ave	20727139		1954	6Z	
7412	Carnelian St	20749102		1920's est.	6Z	SUS
8427	9th St	20753128		1953	6Z	
8431	9th St	20753129		1956	6Z	
8395	9th St	20753172		1936	6Z	
8466	Baker Ave	20759127		1957	6Z	
8488	Arrow Rte	20759129		1954	6Z	
8432	Arrow Rte	20759133		1952	6Z	
8420	Arrow Rte	20759134		1955	6Z	
8410	Arrow Rte	20759135		1952	6Z	
8529	Baker Ave	20762191		1952	6Z	
7327	Beryl Ave	20801116			6Z	PLL
7777	Vineyard Ave	20809119			6Z	PLL
7767	Vineyard Ave	20809120			6Z	PLL
7785	Vineyard Ave	20809123			6Z	PLL

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
7797	Vineyard Ave	20809124			6Z	SUS
7745	Vineyard Ave	20809144			6Z	PLL
9670	San Bernardino Rd	20813110		1920	6Z	
9388	Foothill Bl	20814119		1930	6Z	
9366	Foothill Bl	20814121		1948	6Z	
9356	Foothill Bl	20814122		1948	6Z	
9336	Foothill Bl	20814125		1959	6Z	
9300	Foothill Bl	20814128		1945	6Z	
9328	Foothill Bl	20814142		1937	6Z	
9547	San Bernardino Rd	20815107		1948	6Z	
8042	Archibald Ave	20815216		1960	6Z	
8036	Archibald Ave	20815217		1960	6Z	
8070	Archibald Ave	20815302		1961	6Z	
9635	Estacia Ct	20815318	H.W. Minor	1917 est.	6Z	SUS
9651	Estacia Ct	20815320		1914	6Z	
9665	Estacia Ct	20815322	Harvey	1917 est.	6Z	PLL
9656	Estacia Ct	20815323			6Z	SUS
7091	Hellman Ave	20816228	McDonald House	1944 est.	6Z	SUS
9113	Foothill Bl	20824109	George Klusman House	1911 est.	6Z	PLL/DEM
9006	Arrow Rte	20825109	Grass House	1923 est.	6Z	SUS
8430	Archibald Ave	20881160		1916 est.	6Z	SUS
7411	Beryl Ave	20892101			6Z	PLL
8807	Center Ave	20912201	Market	1920	6Z	PLL
9022	Hellman Ave	20915129			6Z	SUS
9024	Hellman Ave	20915130			6Z	SUS
8981	Archibald Ave	20919102		1940	6Z	
8971	Archibald Ave	20919103		1930	6Z	
8959	Archibald Ave	20919104		1945	6Z	
8930	Belmont Ave	20919110		1920	6Z	
8938	Belmont Ave	20919111		1930	6Z	
8944	Belmont Ave	20919112		1925	6Z	
9725	8th St	20919116		1952	6Z	SUS
8949	Belmont Ave	20919204		1925	6Z	
9797	8th St	20919212	Stipe	1916 Est.	6Z	SUS
9212	Hermosa Ave	20921141		1916 est.	6Z	SUS
10141	8th St	20922105		1920	6Z	
10153	8th St	20922106		1935	6Z	
8933	Center Ave	20924106		1920	6Z	SUS

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
9007	Center Ave	20925106		1926	6Z	
6084	Etiwanda Ave	22511105	Grover Henderson	1932 est	6Z	PLL
5938	Etiwanda Ave	22511112	Fred Henderson	1921 est	6Z	PLL
5992	Etiwanda Ave	22511136		1960	6Z	
12946	23rd St	22512217		1950	6Z	
12922	23rd St	22512219		1965	6Z	
5913	Etiwanda Ave	22512220		1936	6Z	
5913	Etiwanda Ave	22512220	Perdew	1916 est.	6Z	PLL
5927	Etiwanda Ave	22512221	Perdew	1895 est.	6Z	PLL
5939	Etiwanda Ave	22512222		1961	6Z	
12983	23rd St	22512225	E. Clark	1897 est.	6Z	7N (evaluating weir box)
5995	Etiwanda Ave	22512228	Walter Henderson	1955	6Z	PLL
6060	Summit Ave	22512235		1964	6Z	
13066	Summit Ave	22512237		1962	6Z	
6061	Summit Ave	22512251		1964	6Z	
5959	Etiwanda Ave	22512259	Raymond Henderson	1934 est	6Z	PLL
6081	Summit Ave	22512278		1960	6Z	
13100	Summit Ave	22512279		1960	6Z	
6071	Summit Ave	22512280		1937	6Z	
6051	Summit Ave	22512287		1963	6Z	
12710	Highland Ave	22517118		1923 est.	6Z	SUS
13151	Highland Ave	22705106	Kemp	1932 est.	6Z	PLL
6655	Etiwanda Ave	22705110		1955	6Z	
6795	Etiwanda Ave	22706101		1946	6Z	
6893	Etiwanda Ave	22706113		1953	6Z	
12952	Victoria Ave	22706122		1956	6Z	
12930	Victoria Ave	22706124		1956	6Z	
6771	Etiwanda Ave	22706131		1954	6Z	
6781	Etiwanda Ave	22706136		1953	6Z	
13132	Victoria Ave	22706176	Allen	1915 est.	6Z	PLL
7066	Etiwanda Ave	22710109	Huber-Harne	1958 est.	6Z	PLL
7256	Etiwanda Ave	22711110	Johanning/Johnston	1900 est.	6Z	PLL
6990	East Ave	22712136	Jones		6Z	PLL
12906	Baseline Rd	22713117	Gas Station	1915 est.	6Z	PLL
7257	Etiwanda Ave	22713119	Gardner	1917 est.	6Z	SUS
13537	Victoria Ave	22714144	Donnelly	1923 est.	6Z	PLL
12659	Baseline Rd	22717119	Malpasuto	1938 est.	6Z	SUS

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
12951	Baseline Rd	22718120		1915 est.	6Z	SUS
13104	Miller Ave	22718123		est. 1965	6Z	SUS
8062	Etiwanda Ave	22722114	Ingvaldsen Home	Approx. 1915	6Z	PLL
12854	Foothill Bl	22722126			6Z	SUS
13719	Highland Ave	22801118	Tibbets	1937 est.	6Z	SUS
8171	Rochester	22902131			6Z	SUS
5454	Hellman Ave	106138104		1962	6Z	
9292	Hillside Rd	106138106		1957	6Z	
9280	Hillside Rd	106138107		1964	6Z	
9655	Banyan St	106240106			6Z	SUS
9893	Highland Ave / see 6558 Hermosa	107605102	Goerlitz House (Herbert & Evelyn)	1926	6Z	PNR (DLL)
7663	Archibald Ave	107732107	Mathis	1916 est.	6Z	SUS
7649	Archibald Ave	107732108	Carman	1916 est.	6Z	SUS
7627	Archibald Ave	107732110	Beakman House	1916 est.	6Z	SUS
10385	Foothill Bl	20833124-26	HH Thomas & Milliken	1912	6Z	SUS ? SBR- 10,329H
8810	9th St	20726235	Nick's House		6Z	
8593	8th St	20727118			6Z	
8581	8th St	20727117			6Z	
8553	8th St	20727110			6Z	
8531	8th St	20727109			6Z	
8743	Baker Ave	20727104			6Z	
8943	Archibald Ave				6Z	
10125	8th St				6Z	
8380	Arrow Rte				6Z	6Z
8368	Arrow Rte				6Z	6Z
8742	Vinmar Ave	20724215		1934	6Z	SUS
	9th and Vineyard SW corner	20727152	Auto Service		6Z	Survey Determined Insignificance
8591	Grove Ave	20722227		est. 1920	6Z	
7R: Identified in reconnaissance level survey: Not evaluated.						
7802	Hermosa Ave	0			7R	PLL
7751	Valle Vista Dr	20706217		1935	7R	SUS
7404	Archibald Ave	20803117		1916 est.	7R	SUS
7602	Archibald Ave	20804110	Beattie	1916 est.	7R	SUS
9630	San Bernardino Rd	20813114	Morris-Gakle House	1913 Est.	7R	PLL; 3S

Street No.	Street	APN	Other Identifier	Year Constructed	Updated Status Code (2009)	Previous Status Code
7137	Hellman Ave	20839301	Billings House	1928	7R	PLL
7984	Hellman Ave	20839301	Earl & Stella Ledig House	1927 est.	7R	SUS
7431	Beryl Ave	20892102			7R	SUS
9524	Archibald Ave	21006210	Lucas Ranch House	1910	7R	PLL/PNR
13005	23rd St	22512233		1930	7R	
5949	Etiwanda Ave	22512233	Perdew/Fetrow/Orr	1930	7R	PLL
13108	Banyan Ave	22512239	Allen Hickcox	1921 est.	7R	SUS
13149	23rd St	22512242		1904	7R	
13106	Victoria Ave	22706169	Allen	1899 est.	7R	PLL
6558	Hermosa Ave / see 9893 Highland	107605102, 03	Herbert Goerlitz House		7R	PNR (DLL)
8705	8th St	20727114			7R	
6956	East Ave				7R	
5647	Archibald Ave				7R	

Appendix C:
Excerpt from San Bernardino County Historic Property Data File, dated December 3, 2007

OFFICE OF HISTORIC PRESERVATION * * * Directory of Properties in the Historic Property Data File for SAN BERNARDINO County.										Page 38	12-03-07
PROPERTY-NUMBER	PRIMARY-#	STREET ADDRESS	NAMES	CITY-NAME	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
119332	36-018789	691 PENNSYLVANIA AVE		COLTON	P		HIST.RES.	DOE-36-95-0005-0000	07/19/95	6U	
							PROJ.REVW.	HUD950719F	07/19/95	6U	
162079		828 PENNSYLVANIA AVE		COLTON	P	1908	PROJ.REVW.	HUD060217B	05/02/06	6Y	
162080		855 PENNSYLVANIA AVE		COLTON	P	1924	PROJ.REVW.	HUD060217D	05/02/06	6Y	
101403	36-008261	566 S PINE ST	CHAVEZ RESIDENCE	COLTON	P	1920	HIST.RES.	DOE-36-96-0011-0000	03/26/96	6Y	
							PROJ.REVW.	HUD960223A	03/26/96	6Y	
091041	36-015227	SCENIC DR	COOLEY ADOBE	COLTON	P	1862	HIST.RES.	SPHI-SBR-052	08/07/75	7L	
164374		924 SHASTA DR		COLTON	P	1938	PROJ.REVW.	HUD061204D	12/05/06	6Y	
164365		148 W E ST		COLTON	P	1900	PROJ.REVW.	HUD060328A	12/12/06	6Y	
116440	36-018773	258 W F ST		COLTON	P	1890	HIST.RES.	DOE-36-98-0103-0000	07/03/98	6Y	
							PROJ.REVW.	HUD980629K	07/03/98	6Y	
129246		547 W N ST		COLTON	P	1920	HIST.RES.	DOE-36-01-0010-0000	10/17/01	6Y	
							PROJ.REVW.	HUD010830D	10/17/01	6Y	
156556		197 W OLIVE ST		COLTON	P	1925	PROJ.REVW.	HUD051019D	11/04/05	6Y	
066365	36-015228	522 W OLIVE ST	RESIDENTIAL REHABILITATION	COLTON	U		PROJ.REVW.	HUD871116J	12/17/87	6Y	
162078		931 WALNUT COVE		COLTON	P	1954	PROJ.REVW.	HUD060217A	05/02/06	6Y	
091032	36-000093		GUAPIABIT	CRESTLINE	U		HIST.RES.	SPHI-SBR-045	05/09/75	7L	
090999	36-015230	SR 138	SEELY SAWMILL MONUMENT	(VIC) CRESTLINE	U	1853	HIST.RES.	SPHI-SBR-010	06/22/72	7L	
073701	36-015231	10470 FOOTHILL BLVD	VIRGINIA DARE WINERY	CUCAMONGA	P	0	TAX.CERT.	537.9-36-0005		6T	
091028	36-004183		ALF'S BLACKSMITH SHOP	DAGGETT	P	1890	HIST.RES.	SPHI-SBR-041	11/19/74	7L	
155321		39656 NATIONAL TRAILS PARKW	DAGGETT INSPECTION STATION	DAGGETT	C	1953	NAT.REG.	36-0088	09/06/05	7J	
060938	36-005525	SANTA FE ST	THE STONE HOTEL & PEOPLE'S GENERAL	DAGGETT	U		ST.FND.PRG	619.0-HP-88-36-005	12/20/88	3	
							HIST.SURV.	2327-0001-0000		3S	
							HIST.RES.	SPHI-SBR-107	07/02/85	7L	
091027	36-000073		RATTLESNAKE ROCK - DAGGETT - PETRO	(VIC) DAGGETT	U		HIST.RES.	SPHI-SBR-040	09/13/74	7L	
091018	36-000195		WILLIS WELL - STONE MONUMENT AND P	(VIC) DAGGETT	U	1915	HIST.RES.	SPHI-SBR-030	01/15/74	7L	
135843		18423 GRANDVIEW AVE		DEVORE	P	1952	HIST.RES.	DOE-36-02-0030-0000	12/16/02	6Y	
							PROJ.REVW.	HUD021122A	12/16/02	6Y	
109333	36-008828		SCHWANBECK'S STORE (AZ L:16:115)	EARP		1933	HIST.RES.	DOE-36-97-0108-0000	06/27/97	2S2	A
							PROJ.REVW.	BLM970516A	06/27/97	2S2	A
164887				ELD NF			PROJ.REVW.	USFS021001A	10/29/02	6Y	
091064	36-015232	6295 ETIWANDA AVE	GARCIA RANCH HOUSE	ETIWANDA	U		HIST.RES.	SPHI-SBR-082	12/22/75	7L	
072915	36-015233	7150 ETIWANDA AVE		ETIWANDA	U	1874	PROJ.REVW.	HUD910819C	08/23/91	6Y	
073334	36-015238		BIG BEAR CABIN #69	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0059	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073330	36-015262		BIG BEAR CABIN #67	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0057	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073328	36-015242		BIG BEAR CABIN #66	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0056	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073326	36-015236		BIG BEAR CABIN #65	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0055	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073325	36-015235		BIG BEAR CABIN #64	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0054	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073323	36-015249		BIG BEAR CABIN #63	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0053	05/02/91	2D2	AC
							PROJ.REVW.	FHWA910404A	05/02/91	2D2	AC
073321	36-015265		BIG BEAR CABIN #62	FAWNSKIN	U	0	HIST.RES.	DOE-36-91-0015-0052	05/02/91	2D2	AC

OFFICE OF HISTORIC PRESERVATION		* * * Directory of Properties in the Historic Property			Data File for SAN BERNARDINO County.			Page 85	12-03-07			
PROPERTY-NUMBER	PRIMARY-#	STREET-ADDRESS	NAMES	CITY-NAME	OWN	YR-C	OHP-PROG	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT	
068853	36-016410	407 W STATE ST		ONTARIO	U	1909	PROJ.REVW.	HUD900919A	10/15/90	6Y		
059831	36-016411	417 W STATE ST	DOLLAR PRINT SHOP	ONTARIO	U	1890	HIST.SURV.	1761-0188-0000		3S		
124993	36-019705	522 W SUNKIST ST	PROPERTY REHABILITATION	ONTARIO	P	1915	HIST.RES.	DOE-42-00-0001-0000	06/30/00	6Y		
							PROJ.REVW.	HUD000522E		6Y		
059833	36-016412	562 W SUNKIST ST		ONTARIO	U	1914	HIST.SURV.	1761-0190-0000		5S2		
059410	36-016413	425 W T ST	M V B BRADFORD HOUSE	ONTARIO	P	1888	HIST.SURV.	1761-0031-0000		7N		
059457	36-016288	119 W TRANSIT ST	OLD POST OFFICE, COMPANY STORE	ONTARIO	P	1926	NAT.REG.	36-0084	08/18/04	7W		
							HIST.SURV.	1761-0078-0000		5S2		
059834	36-016414	301 W TRANSIT ST	CALIFORNIA APARTMENTS	ONTARIO	P	1912	HIST.SURV.	1761-0191-0000		3S		
059835	36-016415	517 W VESTA ST		ONTARIO	P	1919	HIST.SURV.	1761-0192-0000		5S2		
059836	36-016416	526 W VESTA ST		ONTARIO	P	1928	HIST.SURV.	1761-0193-0000		5S2		
091010	36-016417	EUCLID AVE	SAN BERNARDINO - SONORA ROAD	(VIC) ONTARIO	U		HIST.RES.	SPHI-SBR-021	01/31/73	7L		
061576	36-000072		CULBERTSONS RANCH, CULBERTSONS RAN	ORA GRANDE	U		HIST.SURV.	2368-0001-0000	01/01/79	2S		
091033	36-016418	OLIVE ST	ORO GRANDE CEMETERY	ORO GRANDE	U		HIST.RES.	SPHI-SBR-046	05/09/75	7L		
162094			MAINTENANCE BUILDINGS	PARKER DAM	F	1940	HIST.RES.	DOE-36-99-0356-0003	06/30/99	2D2	AC	
							PROJ.REVW.	BUR990614B	06/30/99	2D2	AC	
162095			PARKER DAM GOVERNMENT CAMP	PARKER DAM	F		HIST.RES.	DOE-36-99-0356-0004	06/30/99	2D2	AC	
							PROJ.REVW.	BUR990614B	06/30/99	2D2	AC	
162093			POWER PLANT	PARKER DAM	F	1939	HIST.RES.	DOE-36-99-0356-0002	06/30/99	2D2	AC	
							PROJ.REVW.	BUR990614B	06/30/99	2D2	AC	
162092			PARKER DAM	PARKER DAM	F	1934	HIST.RES.	DOE-36-99-0356-0001	06/30/99	2D2	AC	
							PROJ.REVW.	BUR990615B	06/30/99	2D2	AC	
163731			PARKER SWITCHYARDS	PARKER DAM	P	1942	PROJ.REVW.	WAPA061024A	10/26/06	6Y		
162091		SR 95	PARKER DAM COMPLEX HISTORIC DISTRI	PARKER DAM	F	1931	HIST.RES.	DOE-36-99-0356-9999	06/30/99	2S2	AC	
							PROJ.REVW.	BUR990614B	06/30/99	2S2	AC	
061578	36-016419	CIRCLE PLACE DR	PATTON STATE HOSPITAL RESIDENCE 2,	PATTON	S	1897	HIST.SURV.	2369-0002-0000		3S		
061577	36-018751	OLIVE ST	PATTON STATE HOSPITAL RESIDENCE 1,	PATTON	S	1915	HIST.SURV.	2369-0001-0000		3S		
059306	36-018750	10323 19TH ST	ALBERT HOUSE	RANCHO CUCAMONGA	P	1906	HIST.SURV.	1730-0001-0000		3S		
059346	36-016420	12983 23RD ST	WEIR BOX	RANCHO CUCAMONGA	C	1880	HIST.SURV.	1730-0037-0000		7N		
059308	36-016421	9663 6TH ST	DEBERARD HOUSE	RANCHO CUCAMONGA	P	1910	HIST.SURV.	1730-0003-0000		7N		
059309	36-016422	9747 8TH ST	DANNER'S MARKET, ENGLISH HOUSE	RANCHO CUCAMONGA	P	1915	PROJ.REVW.	HUD930326G	05/06/93			
							PROJ.REVW.	HUD930326G	05/06/93	6Y		
							HIST.SURV.	1730-0004-0000		5S2		
059310	36-016423	9951 8TH ST	PADRE WINERY, BIANE WINERY	RANCHO CUCAMONGA	P	1909	HIST.RES.	DOE-42-01-0001-0000	08/24/01	2S2	AC	
							PROJ.REVW.	FCC010620C	08/24/01	2S2	AC	
							HIST.SURV.	1730-0005-9999		7N		
059311	36-016424	8308 9TH ST	WINTER HOUSE, BRUBAKER HOUSE	RANCHO CUCAMONGA	P	1913	HIST.SURV.	1730-0006-0000		5S2		
059312	36-016425	9449 9TH ST	KINCAID RANCH	RANCHO CUCAMONGA	P	1897	HIST.SURV.	1730-0007-0000		3S		
059332	36-016426	7914 ALTA CUESTA DR	ADAMS HOUSE	RANCHO CUCAMONGA	P	1935	HIST.SURV.	1730-0023-0000		7N		
059313	36-016427	6743 AMETHYST AVE	STATON-BINGHAM HOUSE	RANCHO CUCAMONGA	P	1922	HIST.SURV.	1730-0008-0000		7N		
059314	36-016428	7125 AMETHYST AVE	ALTA LOMA HEIGHTS CITRUS ASSOCIATI	RANCHO CUCAMONGA	P	1914	HIST.SURV.	1730-0009-0001		3B		
059316	36-016429	7125 AMETHYST AVE	ALTA LOMA HEIGHTS CITRUS ASSOCIATI	RANCHO CUCAMONGA	P	1914	HIST.SURV.	1730-0009-9999		7N		
059315	36-016430	7125 AMETHYST AVE	ALTA LOMA HEIGHTS CITRUS ASSOCIATI	RANCHO CUCAMONGA	P	1929	HIST.SURV.	1730-0009-0002		3B		
059317	36-016431	7201 AMETHYST AVE	RANCHO CUCAMONGA NAZARENE CHURCH,	RANCHO CUCAMONGA	P	1910	HIST.SURV.	1730-0010-0000		5S2		
091058	36-016432	ARCHIBALD AVE	CHRISTMAS HOUSE	RANCHO CUCAMONGA	U	1904	HIST.RES.	SPHI-SBR-073	12/22/75	7L		
059318	36-016433	7403 ARCHIBALD AVE	STRANE HOUSE	RANCHO CUCAMONGA	P	1908	HIST.SURV.	1730-0011-0000		3S		
059322	36-016434	7656 ARCHIBALD AVE	CUCAMONGA OLD STONE CHURCH, CUCAMO	RANCHO CUCAMONGA	P	1909	HIST.SURV.	1730-0013-0000		3S		
059323	36-016435	8204 ARCHIBALD AVE	JAMISON HOUSE	RANCHO CUCAMONGA	P	1926	HIST.SURV.	1730-0014-0000		5S2		
059324	36-016436	8969 ARCHIBALD AVE	WILLOWS SCHOOL, WILLOWS PROFESSION	RANCHO CUCAMONGA	U	1916	HIST.SURV.	1730-0015-9999		3D		

OFFICE OF HIS. C PRESERVATION		* * * Directory of Properties in the Historic Pr. City			Data File for SAN BERNARDINO County.			Page 86	12-03-07			
PROPERTY-NUMBER	PRIMARY-#	STREET ADDRESS	NAMES	CITY-NAME	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT	
059325	36-016437	9240 ARCHIBALD AVE	WHITSON HOUSE / H. D. COUSINS, CHR	RANCHO CUCAMONGA	P	1904	HIST.SURV.	1730-0016-0000			3S	
059326	36-016438	10049 ARROW HWY	SANTOLUCITO HOUSE, FERRET HOUSE	RANCHO CUCAMONGA	P	1915	HIST.SURV.	1730-0017-0000			5S2	
059327	36-016439	10095 ARROW HWY	SANTOLUCITO ITALIAN/AMER MARKET, S	RANCHO CUCAMONGA	P	1928	HIST.SURV.	1730-0018-0000			3S	
091060	36-016440	ARROW SR	MILLIKEN RANCH	RANCHO CUCAMONGA	U	1891	HIST.RES.	SPHI-SBR-075	12/22/75		7L	
059328	36-016441	8308 BAKER ST	ALDERFER HOUSE	RANCHO CUCAMONGA	P	1928	HIST.SURV.	1730-0019-0000			7N	
059329	36-016442	10089 BASE LINE RD	MINOR HOUSE	RANCHO CUCAMONGA	P	1922	HIST.SURV.	1730-0020-0000			3S	
059330	36-016443	12467 BASE LINE RD	ELLENA BROTHERS WINERY, DEL MONTE	RANCHO CUCAMONGA	P	1937	HIST.SURV.	1730-0021-9999			7N	
059331	36-016444	6710 BERYL ST	STOEBE HOUSE, HALL HOUSE	RANCHO CUCAMONGA	P	1895	HIST.SURV.	1730-0022-0000			7N	
059307	36-016445	9317 E 6TH ST	BLESSENT HOUSE	RANCHO CUCAMONGA	P	1922	HIST.SURV.	1730-0002-0000			5S2	
067147	36-016446	6563 EAST AVE	ERNST MUELLER HOUSE	RANCHO CUCAMONGA	U		HIST.RES.	DOE-36-90-0010-0000	03/05/90		2S2 BC	
							PROJ.REVW.	FHWA900209A	03/05/90		2S2 BC	
067146	36-016447	6490 ETIWANDA AVE	JAMES G. ISLE HOUSE	RANCHO CUCAMONGA	U		HIST.RES.	DOE-36-90-0009-0000	03/05/90		2S2 C	
							PROJ.REVW.	FHWA900209A	03/05/90		2S2 C	
059333	36-016448	7089 ETIWANDA AVE	ETIWANDA PACIFIC ELECTR. DEPOT	RANCHO CUCAMONGA	P	1915	HIST.SURV.	1730-0024-0000			3S	
059334	36-016449	7126 ETIWANDA AVE	ETIWANDA CONGREGATIONAL CHURCH	RANCHO CUCAMONGA	P	1902	HIST.SURV.	1730-0025-0000			3S	
059335	36-016450	7150 ETIWANDA AVE	CHAFFEY-GARCIA HOUSE	RANCHO CUCAMONGA	M	1874	HIST.SURV.	1730-0026-0000			7N	
059336	36-016451	7165 ETIWANDA AVE	FISHER HOUSE	RANCHO CUCAMONGA	P	1895	HIST.SURV.	1730-0027-0000			3S	
059338	36-016452	9370 ETIWANDA AVE	ETIWANDA GRAPE PRODUCTS COMPANY	RANCHO CUCAMONGA	P	1935	HIST.SURV.	1730-0029-9999			7N	
059369	36-016453	FOOTHILL BLVD	PACIFIC ELECTRIC OVERCROSSING, SOU	RANCHO CUCAMONGA	D	1929	HIST.SURV.	1730-0060-0005			5S2	
059370	36-016454	FOOTHILL BLVD	OLD SAN BERNARDINO ROAD	RANCHO CUCAMONGA	S	1839	HIST.SURV.	1730-0061-0000			7N	
059339	36-016455	8318 FOOTHILL BLVD	SYCAMORE INN	RANCHO CUCAMONGA	P	1912	HIST.SURV.	1730-0030-0000			3S	
							HIST.RES.	SPHI-SBR-070	12/22/75		7L	
059340	36-016456	8841 FOOTHILL BLVD	JOHN KLUSMAN HOUSE	RANCHO CUCAMONGA	P	1930	HIST.SURV.	1730-0031-0000			3S	
059371	36-015702	8916 FOOTHILL BLVD	CUCAMONGA RANCHO WINERY	RANCHO CUCAMONGA	C		TAX.CERT.	537.9-36-0004	12/16/87		6X	
							HIST.RES.	SHL-0490-0000	10/10/51		7L	
059341	36-016458	9474 FOOTHILL BLVD	SANTOLUCITO HOUSE	RANCHO CUCAMONGA	P	1931	HIST.SURV.	1730-0032-0000			5S2	
059319	36-016459	9670 FOOTHILL BLVD	CUCAMONGA SERVICE STATION	RANCHO CUCAMONGA	P	1915	HIST.SURV.	1730-0012-0001			3B	
059321	36-016461	9670 FOOTHILL BLVD	CUCAMONGA SERVICE STATION	RANCHO CUCAMONGA	P	1915	HIST.SURV.	1730-0012-9999			3S	
059320	36-016460	9670 FOOTHILL BLVD	CUCAMONGA SERVICE STATION	RANCHO CUCAMONGA	P	1915	HIST.SURV.	1730-0012-0002			3B	
059342	36-016462	10211 FOOTHILL BLVD	DE LARSEN HOUSE, MITCHELL HOUSE	RANCHO CUCAMONGA	P	1917	HIST.SURV.	1730-0033-0000			5S2	
059337	36-016463	11871 FOOTHILL BLVD	LA FOURCADES STORE, COWGIRL THEATE	RANCHO CUCAMONGA	P	1922	HIST.SURV.	1730-0028-0000			5S2	
059344	36-016464	11929 FOOTHILL BLVD	AGGAZZOTTI WINERY	RANCHO CUCAMONGA	P	1938	HIST.SURV.	1730-0035-0000			5S2	
059345	36-016465	12737 FOOTHILL BLVD	CUCAMONGA TOP WINERY / BONDED WINE	RANCHO CUCAMONGA	P	1921	HIST.SURV.	1730-0036-0000			5S2	
059347	36-016466	8555 GROVE AVE	SCOTT HOUSE	RANCHO CUCAMONGA	P	1931	HIST.SURV.	1730-0038-0000			5S2	
0124786	36-019694	7269 HAVEN AVE	REVIEW OF PBW FACILITY CM 226-01,	RANCHO CUCAMONGA	P		PROJ.REVW.	FCC000602H	06/15/00		6Y	
059348	36-016467	8812 HAVEN AVE	CUCAMONGA PIONEER WINERY	RANCHO CUCAMONGA	P	1910	HIST.SURV.	1730-0039-9999			7N	
076041	36-016468	5767 HELLMAN AVE		RANCHO CUCAMONGA	U	1898	PROJ.REVW.	HUD920124D	04/07/92		6Y	
059349	36-016469	5991 HELLMAN AVE	HUBER RANCH/KALBACH HOUSE	RANCHO CUCAMONGA	P	1895	HIST.SURV.	1730-0040-0000			7N	
059350	36-016470	6112 HELLMAN AVE	WARREN/THORPE HOUSE	RANCHO CUCAMONGA	P	1890	HIST.SURV.	1730-0041-0000			3S	
059351	36-016471	6156 HELLMAN AVE	GOERLITZ HOUSE	RANCHO CUCAMONGA	P	1902	HIST.SURV.	1730-0042-0000			7N	
059352	36-016472	6551 HELLMAN AVE	LEDIG HOUSE, LEDIG/ANDERSON HOUSE	RANCHO CUCAMONGA	P	1908	HIST.SURV.	1730-0043-0000			7N	
059353	36-016473	7608 HELLMAN AVE	MC CORKLE HOUSE, NESBIT HOUSE	RANCHO CUCAMONGA	P	1924	HIST.SURV.	1730-0044-0000			7N	
068249	36-016474	9553 HIGHLAND AVE	SAM AND ALFREDA MALOOF RESIDENCE	RANCHO CUCAMONGA	U	1952	HIST.RES.	DOE-36-90-0012-0000	08/27/90		2S2 BC	
							PROJ.REVW.	FHWA900209A	08/27/90		2S2 BC	
067145	36-016475	9893 HIGHLAND AVE	HERBERT/EVEKYN GOERLITZ HOUSE	RANCHO CUCAMONGA	U		HIST.RES.	DOE-36-90-0008-0000	03/05/90		2S2 C	
							PROJ.REVW.	FHWA900209A	03/05/90		2S2 C	
059354	36-016476	9611 HILLSIDE RD	GRANDMA ISAAC`S HOUSE	RANCHO CUCAMONGA	P	1900	HIST.SURV.	1730-0045-0000			5S2	
059355	36-016477	9686 HILLSIDE RD	DEMENS HOUSE, TOLSTOY-DEMENS HOUSE	RANCHO CUCAMONGA	P	1891	HIST.SURV.	1730-0046-0000			3S	
059356	36-016478	9983 HILLSIDE RD	CHERBAK HOUSE, STOWE HOUSE	RANCHO CUCAMONGA	P	1921	HIST.SURV.	1730-0047-0000			7N	
059357	36-016479	9404 LA VINE AVE	LEDIG HOUSE	RANCHO CUCAMONGA	P	1895	HIST.SURV.	1730-0048-0000			5S2	
0124768	36-019690	7777 MILLIKAN AVE	REVIEW OF PBW FACILITY CM 380-03,	RANCHO CUCAMONGA	P		PROJ.REVW.	FCC000530C	06/15/00		6Y	
091061	36-016480	SAN BERNARDINO RD	CUCAMONGA CHINATOWN SITE	RANCHO CUCAMONGA	U		HIST.RES.	SPHI-SBR-077	12/22/75		7L	
059358	36-016481	9591 SAN BERNARDINO RD	CHINA HOUSE	RANCHO CUCAMONGA	P	1919	HIST.SURV.	1730-0049-0000			3S	
059359	36-016482	9630 SAN BERNARDINO RD	MORRIS HOUSE, GAKLE HOUSE	RANCHO CUCAMONGA	P	1900	HIST.SURV.	1730-0050-0000			3S	
059343	36-016483	9638 SAN BERNARDINO RD	NOEL HOUSE	RANCHO CUCAMONGA	P	1913	HIST.SURV.	1730-0034-0000			5S2	
059360	36-016484	9650 SAN BERNARDINO RD	BUEHLER HOUSE, POOL HOUSE	RANCHO CUCAMONGA	P	1912	HIST.SURV.	1730-0051-0000			5S2	

OFFICE OF HISTORIC PRESERVATION * * * Directory of Properties in the Historic Property Data File for SAN BERNARDINO County.										Page 87	12-03-07		
PROPERTY-NUMBER	PRIMARY-#	STREET-ADDRESS	NAMES	CITY-NAME	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT		
059361	36-016485	9666 SAN BERNARDINO RD	RAHN HOUSE, WHITING HOUSE	RANCHO CUCAMONGA	P	1913	HIST.SURV.	1730-0052-0000		5S2			
059362	36-016486	9680 SAN BERNARDINO RD	CUCAMONGA ROOMING HOUSE	RANCHO CUCAMONGA	P	1900	HIST.SURV.	1730-0053-0000		3S			
059368	36-016487	7609 TURNER AVE	W.J. KINCAID HOUSE	RANCHO CUCAMONGA	P	1895	HIST.SURV.	1730-0059-0000		3S			
059363	36-016488	7850 VALLE VISTA	SMITH HOUSE	RANCHO CUCAMONGA	P	1931	HIST.SURV.	1730-0054-0000		7N			
059364	36-016489	13181 VICTORIA AVE	HIPPARD RANCH	RANCHO CUCAMONGA	P	1916	HIST.SURV.	1730-0055-0000		7N			
059365	36-016490	13232 VICTORIA AVE	JONES HOUSE	RANCHO CUCAMONGA	P	1911	HIST.SURV.	1730-0056-0000		5S2			
059372	36-015701	7869 VINEYARD AVE	JOHN RAINS HOUSE	RANCHO CUCAMONGA	C	1859	PROJ.REVW.	HUD910806A	08/21/91	7K			
							ST.FND.PRG	619.0-HP-88-36-009	12/20/88	3			
							HIST.RES.	NPS-73000428-0000	04/24/73	1S	ACD		
059366	36-016491	7980 VINEYARD AVE	THOMAS HOUSE	RANCHO CUCAMONGA	P	1926	HIST.SURV.	1730-0057-0000		5S2			
059367	36-016492	9588 WILSON AVE	THORPE HOUSE	RANCHO CUCAMONGA	P	1916	HIST.SURV.	1730-0058-0000		5S2			
132761		5131 CARNELIAN ST	SAM AND ALFREDA MALOOF COMPOUND	(VIC) RANCHO CUCA	P	1956	NAT.REG.	36-0070	08/05/02	7W			
064402	36-016493		TRONA PINNACLES RAILROAD CAMP	(VIC) RED MOUNTAI	U	0000	HIST.SURV.	3558-0001-0000	01/01/76	2S			
084562	36-016497		MILL CREEK 1 AND 2 COTTAGE	REDLANDS	U	1910	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
084565	36-016500		MILL CREEK 1 AND 2 STORAGE BARN	REDLANDS	U	1910	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
084560	36-016496		MILL CREEK 2 POWERHOUSE	REDLANDS	U	1902	PROJ.REVW.	FERC930622B	10/19/93	2S2			
084567	36-016501		LYTLE CREEK POWERHOUSE	REDLANDS	U	1901	PROJ.REVW.	FERC930622C	10/19/93	6Y			
084563	36-016498		MILL CREEK 1 AND 2 BUNKHOUSE	REDLANDS	U	1910	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
084564	36-016499		PLANT SUPERINTENDENT HOUSE - MILL	REDLANDS	U	1910	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
084561	36-016494		MILL CREEK 1 POWERHOUSE/SOUTHERN C	REDLANDS	U	1892	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
084566	36-016495		MILL CREEK 1 AND 2 COMPANY HOUSE	REDLANDS	U	1910	PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
090993	36-016502		PROSPECT PARK	REDLANDS	M	1896	HIST.RES.	SPHI-SBR-002	07/28/70	7L			
094721	36-016503		SMILEY PARK HISTORIC DISTRICT	REDLANDS	P	1887	HIST.RES.	NPS-94001487-9999	12/29/94	1S	AC		
							NAT.REG.	36-0018	12/29/94	1S	AC		
108586	36-016504		UNIVERSITY OF REDLANDS MEMORIAL CH	REDLANDS			PROJ.REVW.	FEMA960603A	08/19/96	2S2	C		
115271	36-016505		HORSE DRAWN ROAD-GRADER	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0005	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115266	36-018760		SAR 1 POWERHOUSE, BARN, AND SHOP	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0001	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115263	36-018759		SOUTHERN CA EDISON CO., SANTA ANA	REDLANDS	P	1897	HIST.RES.	DOE-36-87-0001-9999	09/03/87	2S2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2S2	ABC		
115274	36-018765		SAR 2 POWERHOUSE	REDLANDS	P	1904	HIST.RES.	DOE-36-87-0001-0007	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115269	36-018763		MACHINE SHOP EQUIPMENT	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0004	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115272	36-018764		SAR 1 HOUSE SITE	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0006	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115284	36-018767		SAR TELEPHONE BOOTH & TELEPHONE	REDLANDS	P		HIST.RES.	DOE-36-87-0001-0009	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115292	36-018769		SAR FLUME AND TUNNELS	REDLANDS	P		HIST.RES.	DOE-36-87-0001-0011	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115295	36-018770		SAR 3 POWERHOUSE	REDLANDS	P		HIST.RES.	DOE-36-87-0001-0012	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115713	36-018771		MILL CREEK POWERHOUSES, REDLANDS E	REDLANDS			HIST.RES.	DOE-36-93-0003-9999	10/19/93	2S2	ABC		
							PROJ.REVW.	FERC930622B	10/19/93	2S2	ABC		
115267	36-018761		SAR 1 ORIGINAL SWITCHING EQUIPMENT	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0002	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115268	36-018762		SAR 1 ORIGINAL UNIT	REDLANDS	P	1898	HIST.RES.	DOE-36-87-0001-0003	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115289	36-018768		SAR 2 HOUSE SITES	REDLANDS	P		HIST.RES.	DOE-36-87-0001-0010	09/03/87	2D2	ABC		
							PROJ.REVW.	COE870819A	09/03/87	2D2	ABC		
115282	36-018766		SAR 2 UNIT AND EXCITER	REDLANDS	P	1904	HIST.RES.	DOE-36-87-0001-0008	09/03/97	2D2	ABC		

Appendix D:
Neighborhood Character Area Records
(California Department of Parks and Recreation DPR 523d forms)

*Resource Name or # (Assigned by recorder): Cucamonga Neighborhood Character Area

D1. Historic Name: Cucamonga

D2. Common Name: Cucamonga

***D3. Detailed Description** (Discuss overall coherence of district, its setting, visual characteristics, and minor features. List all elements of district.):

Situated in the center of the City of Rancho Cucamonga, north of the Santa Fe Railway, the Cucamonga Neighborhood Character Area (NCA) includes historic resources important to development of the Cucamonga town site, which began in the early 1880s. While coherence of the original town center has been somewhat interrupted by contemporary residential development, namely the "Main Street Route 66" multifamily development and trailer park stretching from Foothill Boulevard to San Bernardino Road in the center of the proposed NCA, the Cucamonga NCA still retains a sense of time and place as a town center. Lack of integrity to individual properties keeps the area from appearing eligible as a potential historic district.

Contributing resources to the Cucamonga NCA include single-family residences constructed prior to 1945 and retaining some degree of architectural integrity; buildings and archaeological resources related to the early "Chinatown" settlement (located at 9591 San Bernardino Road, currently a designated local landmark; Fig 10); buildings, such as schools, offices and community facilities constructed prior to 1945, possessing a clear linkage to early town center development and retaining some degree of architectural integrity; previously designated historic resources significant for their contribution to early town center development. Note that historic buildings constructed in the Cucamonga NCA prior to 1880 or after 1945 or with low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to early town center development.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.):

The Cucamonga NCA centers on the historic Cucamonga town center, roughly defined as the area from the north side of Foothill Boulevard / Route 66, extending to the north side of San Bernardino Road, bounded by Hellman Avenue to the west and Archibald Avenue to the east.

***D5. Boundary Justification:**

The Cucamonga NCA contains a concentration of buildings constructed prior to 1945 and retains a strong sense of time and place as a town center dating from the turn of the twentieth century. The majority of extant historic resources in the Cucamonga NCA are currently situated on Estacia Court, Foothill Boulevard, San Bernardino Road and Klusman Road.

***D6. Significance: Context:** Acquisition of Land and Water (1877-1946) **Theme:** Acquisition of Land and Water (1877-1946) and **Theme:** Chinese Immigrant Workers (1880-1900); **Context:** Railroad Development and the Agriculture Industry (1887-1970) **Theme:** Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945)

Period of Significance: 1880-1945 **Applicable Criteria:** A/1 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

California Department of Parks and Recreation 523a survey forms
City of Rancho Cucamonga Applications for Historic Landmark and Point of Interest Designations
City of Rancho Cucamonga Historic Landmarks and Points of Interest, May 2006
Clucas, Donald L. *Light Over the Mountain: A History of the Rancho Cucamonga Area*. Upland: California Family House, 1979.

***D8. Evaluator:** Jenna Snow with Kathryn McGee

Date: November 6, 2009

Affiliation and Address: Chattel Architecture, Planning & Preservation, Inc.,
13417 Ventura Boulevard, Sherman Oaks, CA 91423

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance

...Cucamonga developed in the 1880s as an agricultural community (Figs 1-5) with a small commercial core centered on Archibald Avenue, connected the center of Cucamonga to the Santa Fe Railway and community of North Town to the south (Figs 6-9). These buildings have, for the most part, been demolished, although Archibald between San Bernardino Road and Foothill Boulevard remains a commercial corridor. The period of significance for the NCA ends in 1945 because the majority of extant buildings associated with early town center development had been constructed by the mid-1940s; postwar development after 1945 did not contribute to the contexts and themes associated with Cucamonga town center development.

Estacia Court, located one block south of San Bernardino Road, between Klusman and Archibald Avenues, currently contains a collection of approximately eleven modest single-family Craftsman and Wood-Frame Vernacular bungalows, the majority of which were constructed by 1929, with at least five constructed prior to 1915 (Fig 12, typical Cucamonga NCA bungalow). Foothill Boulevard in the NCA was historically mostly residential, containing modest single-family residences constructed around the same time as those on Estacia Court, although many of these homes have been demolished or significantly altered. Available records indicate that the Klusman Brothers (John, George and Henry) developed the majority of the residences constructed on Estacia Court and Foothill Boulevard (within the Cucamonga NCA) from the early 1910s through the 1930s. Each brother also made significant contributions to local development citywide.

John Klusman was cofounder of the Mission Winery (later renamed Virginia Dare Winery), developer of the Sycamore Inn on Foothill Boulevard and First National Bank of Cucamonga (later became Bank of America) and was president of the Cucamonga Water District for years.¹ He developed numerous properties throughout the City.² Klusman Avenue was named after John, who requested the road be constructed to connect San Bernardino Road to Foothill Boulevard, providing convenient access to both roads from his office at the Water District (located at the southeast corner of San Bernardino Road and Klusman Avenue).³ George Klusman was president of the First National Bank of Cucamonga and was also president of the Cucamonga Citrus Association and "one of the most noted potato producers in all of Southern California."⁴⁵ Henry Klusman planted vineyards and grew citrus, was involved in concrete irrigation system construction, and developed buildings throughout the City,⁶ including the Alta Loma School in 1921, located at 9488 19th Street (school was extensively remodeled in the 1960s and restored to its original appearance in the 1990s)⁷.

Between 1916 and 1927, John Klusman developed at least four bungalows on Foothill Boulevard in the Cucamonga NCA, located at 9618-9642 Foothill (all four were demolished in 1993, currently site of vacant lot west of the historic Richfield Oil Station). George and Henry Klusman were responsible for construction of at least six bungalows (located at 9424-9494 Foothill Boulevard) on this stretch of Foothill Boulevard in or around 1934, all of which were demolished in 2004-2005.⁸ This collection of development is known as the "Klusman Trak."⁹ Two additional historic bungalows on this segment of Foothill Boulevard are extant, located at 9612 Foothill Boulevard (constructed c. 1946) and northeast corner of Foothill Boulevard and Klusman Avenue. In addition, approximately six similar bungalows (developer unknown) constructed in the 1930s and 1940s are located just east of Hellman Avenue and west of the "Main Street at Route 66" development, although these bungalows as a group tend to lack architectural integrity and

¹ Clucas 108.

² John Klusman's House, constructed in 1928 and designed by Los Angeles-based firm Allison & Allison, is currently extant at 8841 Foothill Boulevard, located just east of Vineyard Avenue. (City of Rancho Cucamonga Historic Landmarks and Points of Interest, May 2006, 21, 52; Sanborn Fire Insurance Map of area, 1929).

³ Clucas 108.

⁴ Ibid.

⁵ City of Rancho Cucamonga Application for Historic Landmark Designation for 9113 Foothill Boulevard (George Klusman House), prepared by Maxine Strane, January 1987.

⁶ Clucas 107.

⁷ City of Rancho Cucamonga Historic Landmarks and Points of Interest, May 2006, 29.

⁸ Ibid., 52.

⁹ California Department of Parks and Recreation 523a survey form for 9474 Foothill Boulevard; by Lynn Merrill, September 1987.

CONTINUATION SHEET

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance

... several have been significantly altered and converted to commercial use. Available records indicate that the Klusmans are responsible for construction of at least two bungalows on Estacia Court, likely more.¹⁰

As early as 1887, San Bernardino Road acted as an important road linking Cucamonga with the neighboring community of Ontario to the west, terminating at Euclid Avenue in Ontario and ending near present-day Milliken Avenue to the east. Important community buildings, including a post office, school (Fig 13), rooming house for migrant workers (Fig 11) and hotel, were located on San Bernardino Road between Vineyard and Archibald Avenues. Cucamonga Water Company reservoir (not extant) and office buildings (currently site of Chino Basin Watermaster office, located at 9641 San Bernardino Road) were located at the southwest corner of San Bernardino Road and present-day Klusman Avenue by at least 1913 (A map of Cucamonga dated c. 1886 indicates a reservoir was present on the site as early as 1886 (Figs 4; Reservoir also shown in Figs 6, 7 and 9). A group of homes housing Chinese immigrant workers, known locally as "Chinatown," was located at the southwest corner of San Bernardino Road and present-day Klusman Avenue in the late 1880s. Only one building associated with the early Chinese community in Rancho Cucamonga remains, constructed c. 1919. This site may yield significant archaeological resources. San Bernardino was terminated at Archibald Avenue to the east as early as 1913 (Fig 6); either the Pacific Electric Railway, built through Rancho Cucamonga in 1914, or the channelized Cucamonga Creek, both of which intersect San Bernardino Road, appear to have severed San Bernardino Road to the west in the early 1900s. Despite the fact that San Bernardino Road has been segmented, it retains a collection of important historic resources, forming the northern border of the Cucamonga NCA. San Bernardino Road also contains single-family Craftsman and wood-frame vernacular homes extant from the early 1900s.

¹⁰ City of Rancho Cucamonga Application for Historic Landmark and Point of Interest Designation forms for 9506 and 9611 Estacia Court, completed by Arlene Banks, March 1988.

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*Date: Nov. 6, 2009 Continuation Update

Cucamonga * Fruit * Lands.

THESE lands, situated on the lines of the Southern Pacific Railroad and the Atchison, Topeka & Santa Fé Railway, and adjoining the famous Cucamonga Vineyard, are offered for sale in ten and twenty acre lots, with one miner's inch of water (amounting to 13,000 gallons of water per day) for every ten acres, delivered upon the land in iron pipes under pressure from distributing reservoirs; at the price of \$150.00 per acre.

The water, pure and cold, rises in tunnels and artesian wells on the Company's property and is not subject to any question of "Riparian Rights" or prior appropriation.

The situation of the Tract is unsurpassed—located above the frost and fog belt, and overlooking the broad San Bernardino Valley, with the Sierra Madre, Cucamonga, San Bernardino and Temescal ranges of Mountains, together with the majestic peaks of San Bernardino (elevation 11,800 feet), Gray Back (elevation 13,000 feet) and San Jacinto (elevation 9,000 feet), in full view.

The soil is chocolate colored and reddish loam, of great depth and wonderful fertility and is unsurpassed for the culture of Citrus and Deciduous fruits, and vines. This is no surmise, as the Cucamonga Vineyard, some of which has been set out forty years, is hardly equaled for productiveness and quality by any in Southern California. The fine deciduous and citrus orchards already in bearing on the Tract and on the tracts immediately surrounding it fully attest to the excellence of the soil and climate as a fruit-growing locality. For wine or raisin grape, the orange and lemon, the locality is as fine as any in the state.

There are two Railroad Stations on the main lines of the two trans-continental roads on the Tract—North Cucamonga and Cucamonga, only two miles apart, and daily mails are received at each.

The location is on the Southerly Slope, in an east and west valley, with the lofty Sierra Madre Mountains on the north; the inexhaustible snows of which supply the subterranean streams which irrigate these lands. Adjacent on the west is the Ontario Colony; on the south, the Chino; on the east, Etiwanda and Rialto; and on the north, Hermosa and Iowa Colonies.

This place is not experimental as the old citrus and deciduous orchards and vineyards of each kind attest. The community is composed of intelligent, educated people with schools and churches. The Chaffey College of Agriculture is but two miles distant. Title to the land is perfect and each purchaser is furnished a Certificate of Title from searchers of Records. Free conveyances at North Cucamonga will show parties over land.

Terms: One-third cash, balance in one and two years with 8 per cent. interest.

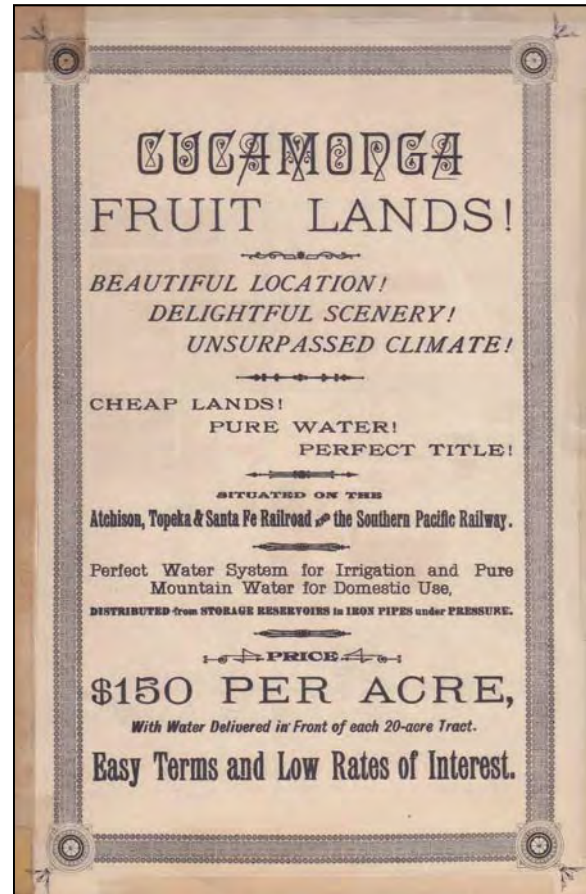
CUCAMONGA FRUIT LAND CO.
I. W. HELLMAN, Pres. O. C. MATTHAY, Sec'y.
North Cucamonga, Cal.

For further particulars apply to
J. C. LYNCH or O. C. MATTHAY,
North Cucamonga, Cal.
E. T. WRIGHT,
Cor. Franklin and New High Streets, Los Angeles.
M. L. WICKS,
Cor. Main and Court Streets, Los Angeles.

Fig. 1: Image 1/4 from Cucamonga Fruit Lands Advertisement (c. 1887) (Source: Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update



Figs 2 and 3: Images from Cucamonga Fruit Lands Advertisements from c. 1886 (left) and c. 1887 (right); Note: lands sold for \$90 per acre in 1886 were sold for \$150 per acre in 1887, reflecting the initial boom in growth in early Cucamonga (Source: Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)

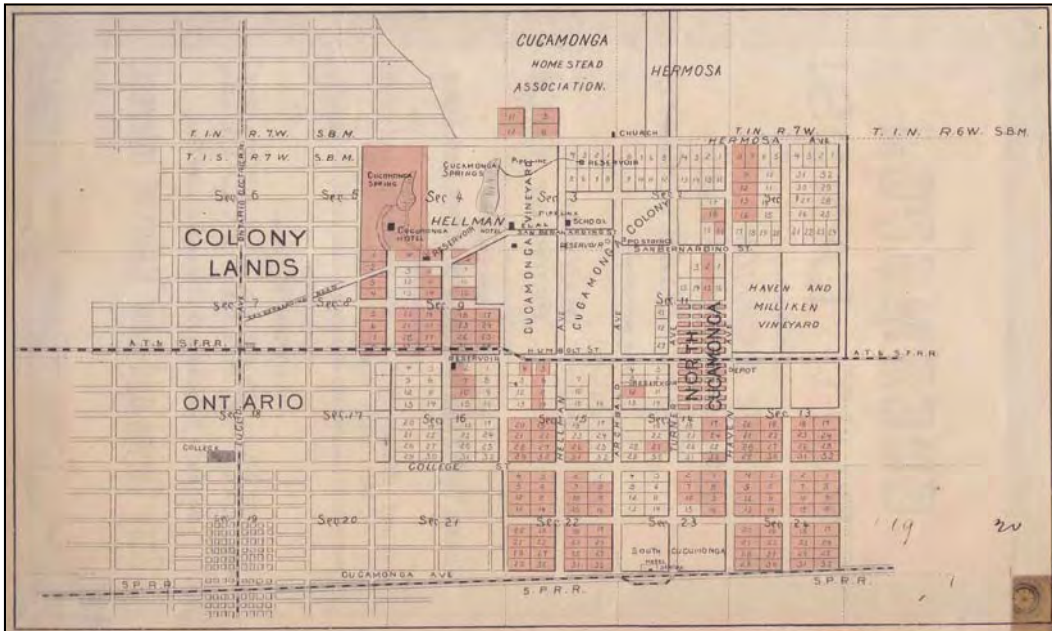


Fig. 4: Map of Cucamonga from Cucamonga Fruit Lands Advertisement (c. 1887) (Source: Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)

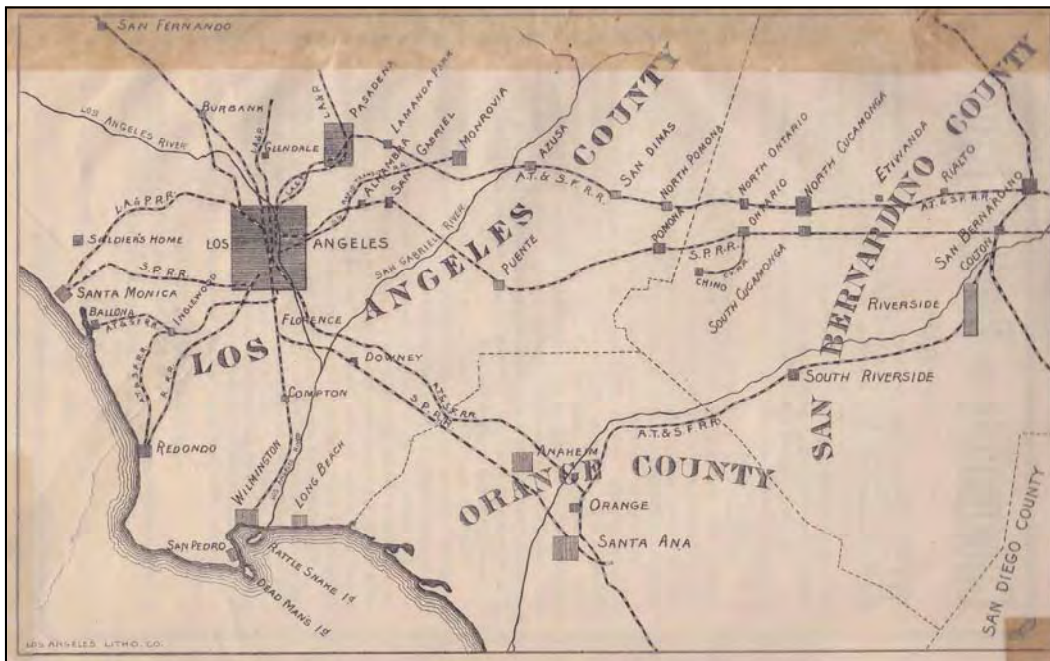


Fig. 5: Regional map from Cucamonga Fruit Lands Advertisement (c. 1887) (Source: Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)

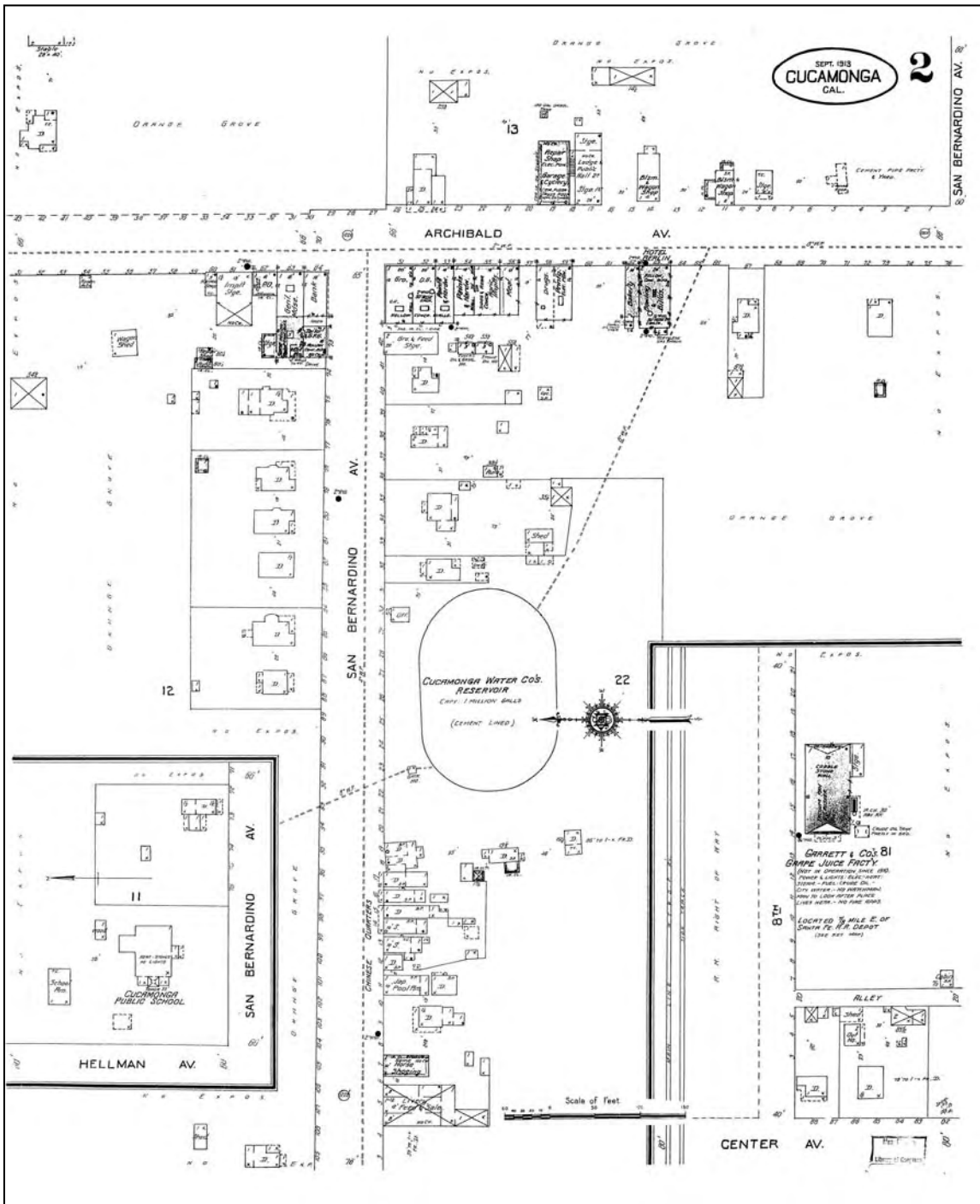


Fig. 6: Sanborn Fire Insurance Map (1913) showing development of the Old Cucamonga town center along San Bernardino and Archibald Avenues. Map includes the Chinatown site ("Chinese Quarters"), single family dwellings on San Bernardino Avenue, commercial properties lining Archibald Avenue, and Cucamonga Public School site at the northeast corner of Hellman and San Bernardino Avenues.

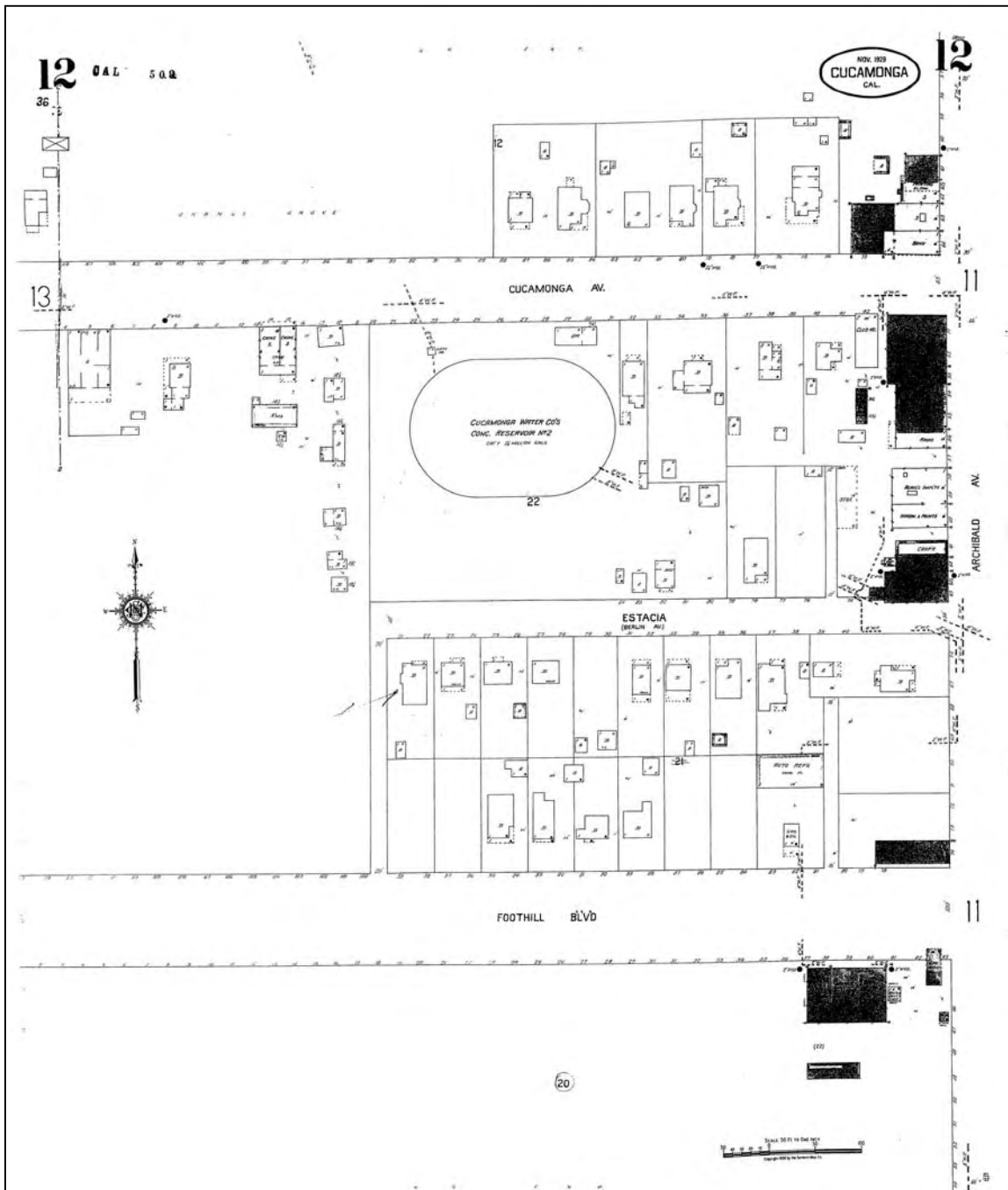


Fig. 7: Sanborn Fire Insurance Map (1929) showing development of Old Cucamonga centered on Cucamonga Avenue, Archibald Avenue and Estacia. Note modestly sized single family dwellings line the south and part of the north sides of Estacia.

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Fig. 8: Archibald Avenue looking south toward San Bernardino Road, showing Archibald Avenue as a commercial corridor linking Cucamonga to North Town to the south (c. 1920) (Clucas, Donald L. Light Over the Mountain: A History of the Rancho Cucamonga Area. Upland: California Family House, 1979, 165).



Fig. 9: 1938 aerial photograph of a portion of the Old Cucamonga area, focusing on development on and around San Bernardino Road, Estacia Court, and Klusman Avenue. A current (2009) parcel map overlays the 1938 aerial. (historic aerial: GeoSearch, Inc.; map overlay: Hogle-Ireland, Inc.)

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*Date: Nov. 6, 2009 Continuation Update



Fig. 10: View southwest of remaining building at "Chinatown" site, 9591 San Bernardino Road (1919) (Chattel Architecture, 2009).



Fig. 11: View northwest of Cucamonga Rooming House, 9680 San Bernardino Road (c. 1900) (Chattel Architecture, 2009).



Fig. 12: View north of typical historic single-family residence in Cucamonga NCA, located 9346 San Bernardino Road (1915) (Chattel Architecture, 2009).



Fig. 13: View northeast of Sweeten Hall (c. 1915-1917, formerly Central Public School), located 9324 San Bernardino Road (Chattel Architecture, 2009).

*Resource Name or # (Assigned by recorder): North Town Neighborhood Character Area

D1. Historic Name: North Town

D2. Common Name: North Town

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

Situated in the southern portion of the City of Rancho Cucamonga, located north of the Santa Fe Railway, the North Town Neighborhood Character Area (NCA) includes historic architectural resources and cultural landscape features important to early development of the North Town neighborhood, which began in the late 1880s as the southern portion of the town of Cucamonga. Lack of integrity to individual properties keeps the area from appearing eligible as a potential historic district.

Contributing resources to the North Town NCA include single-family residences constructed prior to 1945 and retaining some degree of architectural integrity; buildings, such as wineries, schools, commercial buildings, churches, offices and community facilities constructed prior to 1945, possessing a clear linkage to early neighborhood development, including a strong relationship to the Santa Fe Railway, and retaining some degree of architectural integrity; buildings significant for their association with the early Mexican immigrant community in North Town; previously designated historic resources significant for their contribution to early neighborhood development; cultural landscape features such as windrows, vineyards, citrus groves, and stone curbs. Note that historic buildings constructed in the North Town NCA prior to 1887 or after 1945 or with a low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to early town center development.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements):
North Town is situated ironically south of the historic Cucamonga town center, straddling the Santa Fe Railroad and roughly bounded by Haven and Hellman Avenues to the east and west, Feron to the north, and 7th Street to the south.

***D5. Boundary Justification:**

The North Town NCA contains a concentration of historic resources significant for their association with early development of the North Town neighborhood and history of the neighborhood as a Mexican immigrant community largely composed of agricultural workers employed in nearby citrus and wine growing and packing operations. Proximity to the railway is of particular significance for this community, as those living in North Town tended to work in canneries, packing houses, and winery buildings located on or adjacent to the Santa Fe Railway.

***D6. Significance: Context:** Railroad Development and the Agriculture Industry (1887-1970) **Theme:** Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945) **and Theme:** Winemaking (1858-1970)

Period of Significance: 1887-1945 **Applicable Criteria:** A/1 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):
Clucas, Donald L. Light Over the Mountain: A History of the Rancho Cucamonga Area. Upland: California Family House, 1979.
Balgooy, Max van. "North Town: A Disregarded Community, A focus on the 1930s," Paper for Dr. Carlos Cortes, Chicano Studies 2, 1980. 2 Dec 1980, 1.
Gracia, Nacho, Oral Interview (Interviewers: Margo McBane and Margaret Finnegan), Rancho Cucamonga Oral History Project, 5 June 2001.

***D8. Evaluator:** Jenna Snow with Kathryn McGee **Date:** November 6, 2009
Affiliation and Address: Chattel Architecture, Planning & Preservation, Inc.,
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CONTINUATION SHEET

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance:

...Named for its position to the township of Guasti (a self-contained wine company town) to the south,¹ and situated directly on the Santa Fe Railway south of the historic Cucamonga town center (Figs 1-6), North Town developed in the early 1900s as a neighborhood for agricultural workers (Figs 9-12). By the 1930s it had become a community of Mexican immigrants who had moved to the region looking for work during the Great Depression, eagerly answering the demand for agricultural laborers to pick grapes, maintain vineyards and work picking and packing citrus.² The community was for a time a distinctly defined land area surrounded by vineyards, orchards, and empty fields on all sides.³ In the early 1900s, several other Latino neighborhoods were located throughout the City, including a neighborhood on Monte Vista Street in Alta Loma and one on Base Line Avenue in Etiwanda, where the I-15 Freeway now passes through the City.⁴ Mexican immigrants also lived in Guasti. The 1930s-era worker housing in North Town tended to be small in size, containing only one or two bedrooms, one outhouse, and sometimes a garage or additional outbuilding (Figs 10-12).⁵ North Town was connected to Cucamonga by commercial development along Archibald Avenue and is treated as part of Cucamonga. In a map of the area dated ca. 1886, a rectangular area located northeast of the intersection of Archibald and the Santa Fe Railway is identified as "Town Site" and contains markers identifying the site of a hotel and the "Cucamonga Station," indicating that the core of the area currently referred to as "North Town" historically served as a sort of secondary town center for Cucamonga (Fig 1). North Town contains a collection of railroad-oriented industrial, institutional, commercial, and residential properties. The period of significance for the NCA ends in 1945 because the majority of extant buildings associated with early neighborhood development had been constructed by the mid-1940s; postwar development in the area after 1945 did not contribute to the contexts and themes associated with North Town neighborhood development.

¹ Max van Balgooy. "North Town: A Disregarded Community, A focus on the 1930s," Paper for Dr. Carlos Cortes, Chicano Studies 2, 1980. 2 Dec 1980, 1.

² Ibid., 2-3.

³ Nacho Gracia. Interview, 5 June 2001, Rancho Cucamonga Oral History Project, 2.

⁴ Ibid., 5.

⁵ Ibid., 3.

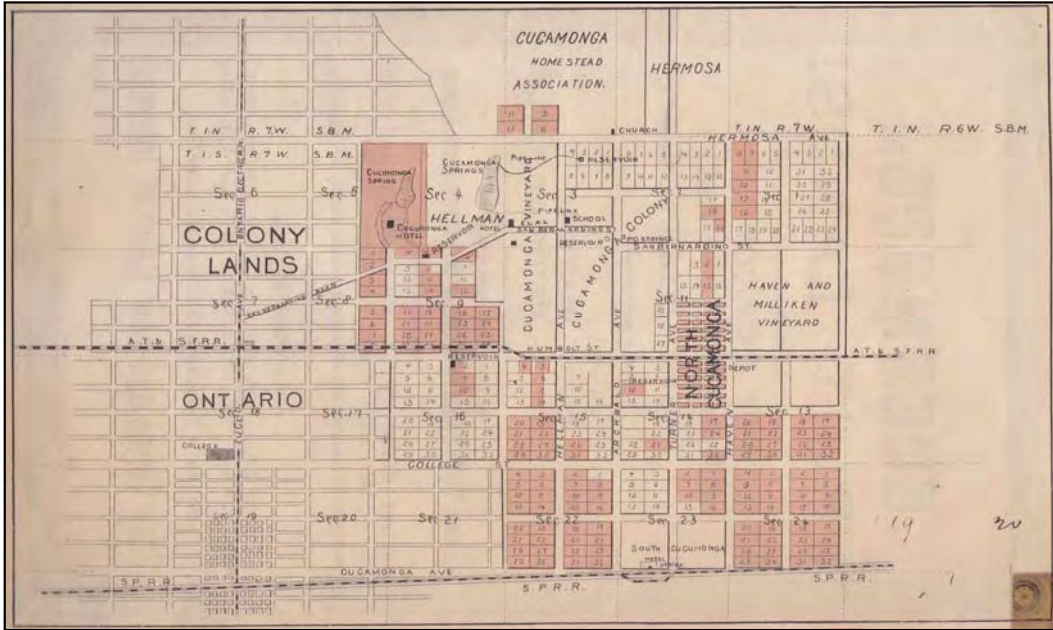


Fig. 1: Map of Cucamonga from Cucamonga Fruit Lands Advertisement (c. 1887) (Source: Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)

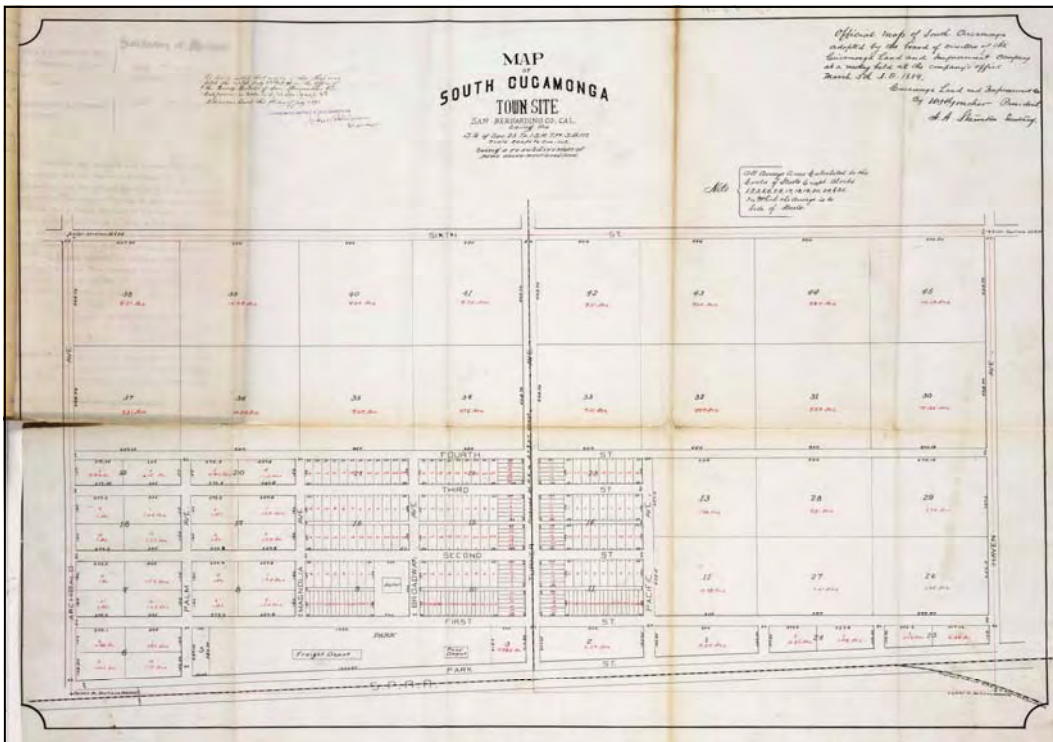


Fig. 2: Map of "South Cucamonga" (North Town), showing northeast corner of Archibald Avenue and Santa Fe Railway / 8th Street (1889) (Huntington Library)

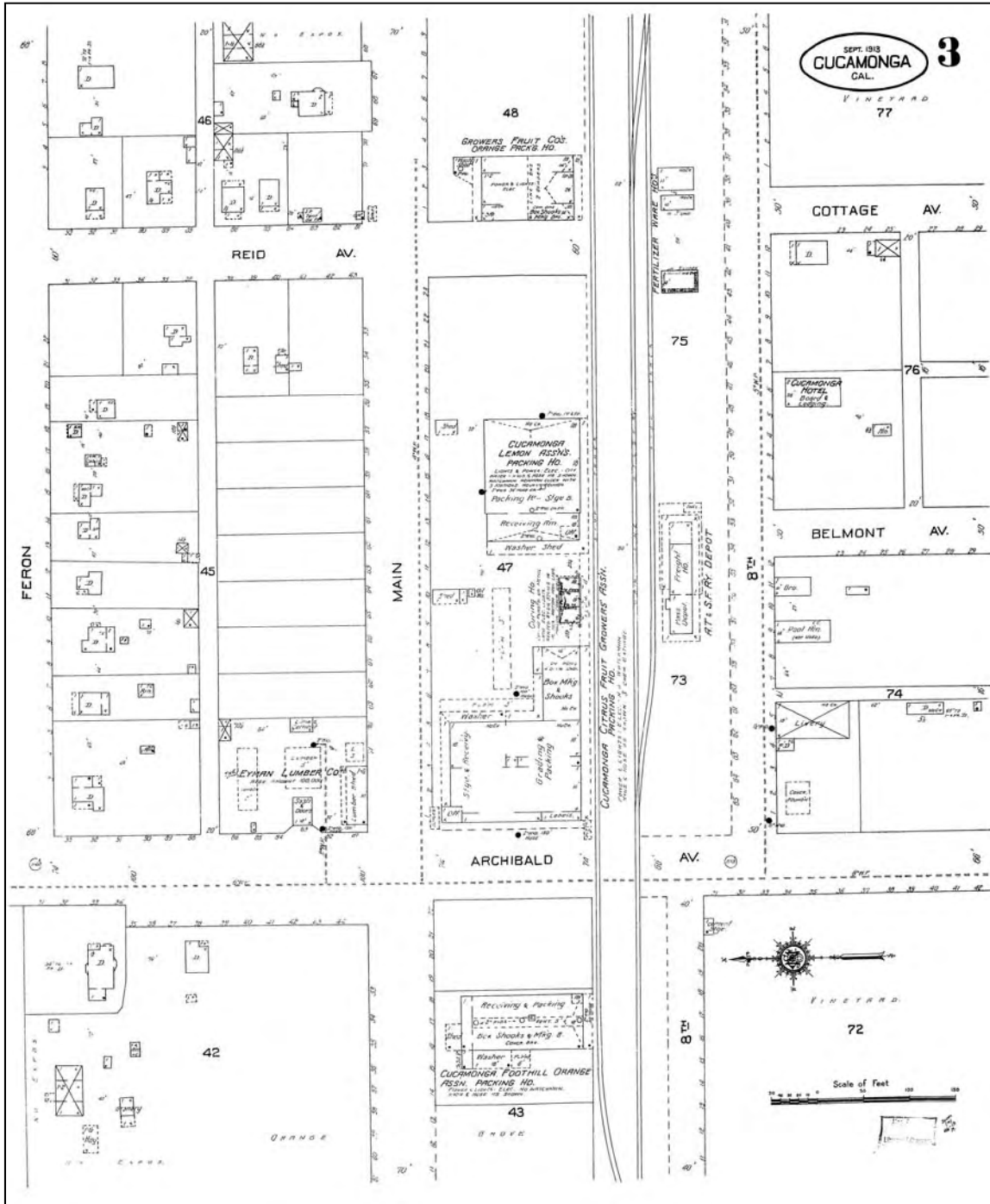


Fig. 3: Sanborn Map (1913) showing North Town area, centered on Archibald Avenue and 8th Street (parallel to Santa Fe Railway). Map shows a variety of railroad-oriented buildings, including packing houses lining the railway, the Santa Fe Railway Depot, livery stable, hotel, lumber company, and single family residences.

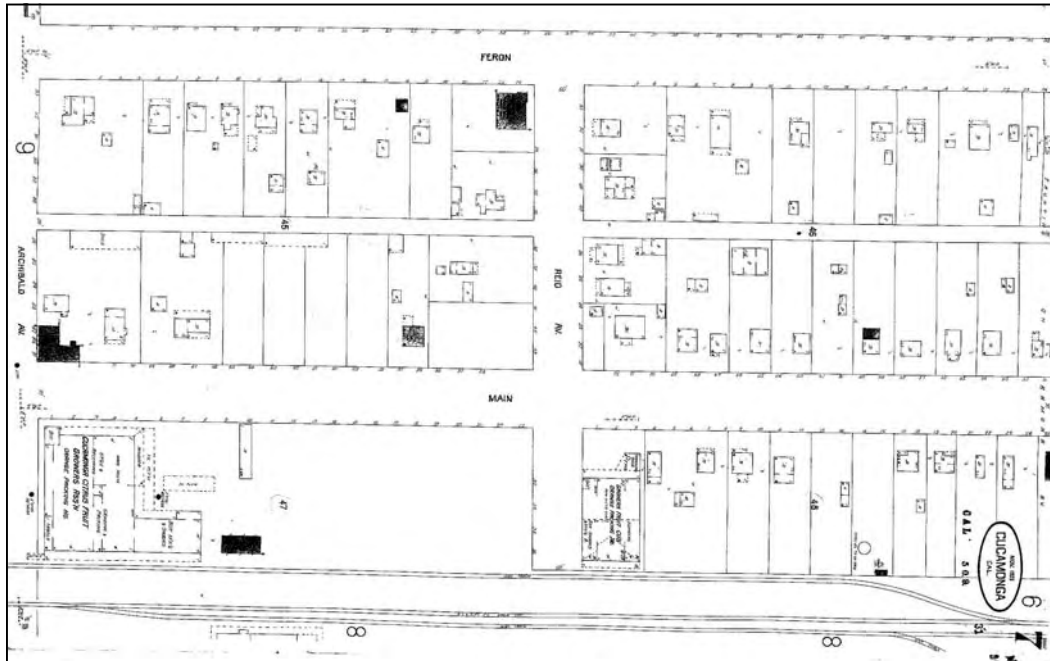


Fig. 4: Sanborn Map (1929), North Town, showing Archibald Avenue (left), railroad-oriented buildings lining Santa Fe Railway (bottom) and single-family residences on Feron Street, Reid Avenue and Main Street

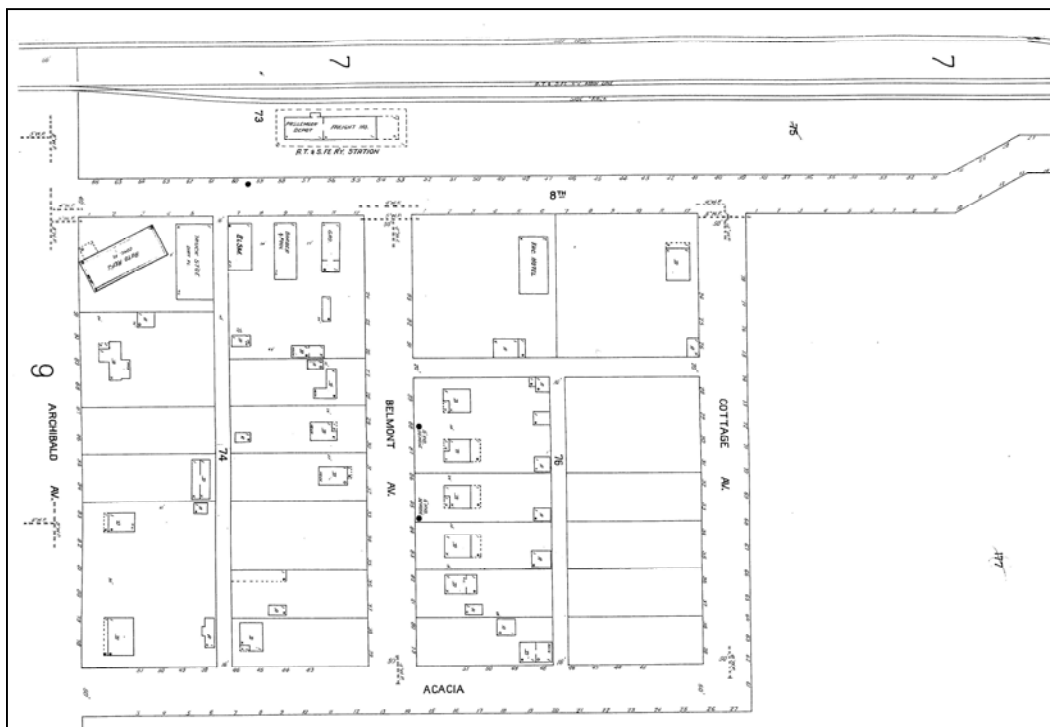


Fig. 5: Sanborn Map (1929), North Town, showing Archibald Avenue (left) and 8th Street (parallel to Santa Fe Railway). Map shows the Santa Fe Railway Depot, commercial buildings on 8th Street and single family residences.

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*Date: Nov. 6, 2009 Continuation Update

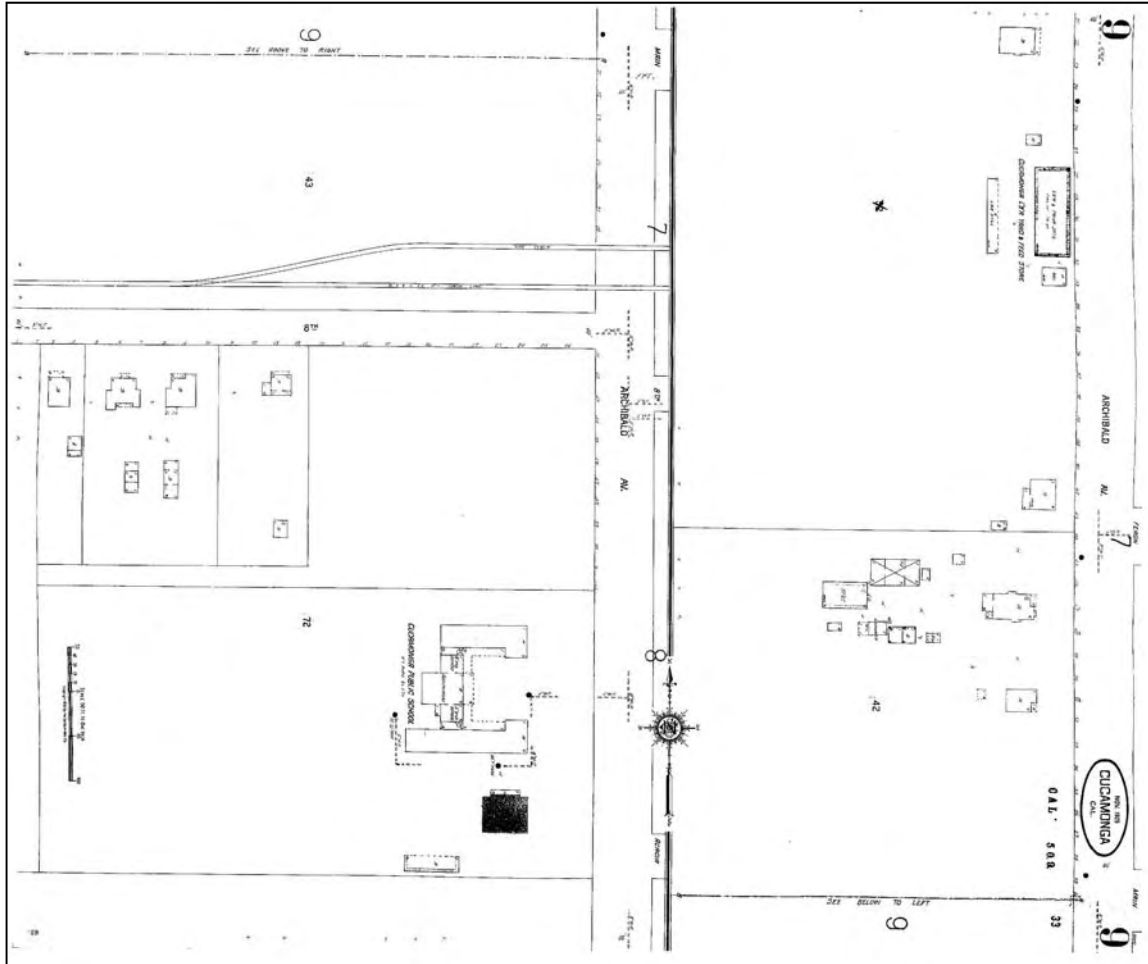


Fig. 6: Sanborn Map (1929), North Town, showing intersection of Archibald Avenue and 8th Street with Cucamonga Public School (currently Sweeten Hall) (map to left) and showing intersection of Archibald Avenue and Feron Street (map to right)

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Fig. 7: View northwest, Intersection of 8th and Archibald Avenue along Santa Fe Railway c. 1900 (Clucas, Donald L. Light Over the Mountain: A History of the Rancho Cucamonga Area. Upland: California Family House, 1979, 77).



Fig. 8: View northwest, Cucamonga train depot on Santa Fe Railway (constructed 1887) (date and source unknown)

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Fig. 9: North Town, View west of Willows School, 8969 Archibald Avenue (1916) (Chattel Architecture, 2009).



Fig. 10: North Town, View southwest of single-family housing located immediately south of Santa Fe Railway, 9677 Archibald Avenue (construction date unknown) (Chattel Architecture, 2009).



Fig. 11: North Town, View south of Depression-Era housing, 10147 8th Street (c. 1935) (Chattel Architecture, 2009).



Fig. 12: North Town, View southwest of Danner's Market, 9747 8th Street (c. 1915) (Chattel Architecture, 2009).

*Resource Name or # (Assigned by recorder): Alta Loma Neighborhood Character Area

D1. Historic Name: Alta Loma

D2. Common Name: Alta Loma

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

Situated in the northwest portion of the City of Rancho Cucamonga centering on Amethyst Avenue, which runs north-south, the Alta Loma Neighborhood Character Area (NCA) includes historic resources important to early development of the Alta Loma town center, which began development in the 1880s. While coherence of the original town center has been somewhat interrupted by loss of historic resources and the intrusion of contemporary development, the Alta Loma NCA still retains a sense of time and place as an early 20th century town center. Lack of integrity to individual properties keeps the area from appearing eligible as a potential historic district.

The Alta Loma NCA contains six historic commercial properties, three of which are designated local landmarks, including Alta Loma Fire Hall, located at 7152 Amethyst Avenue, Henry Albert Building (currently Dr. Strange Records), located at 7136 Amethyst Avenue, and Roth's Store and Post Office (Ernie's Place), located at 7157 Amethyst Avenue (Figs 3-5). Homes located in the historic Alta Loma town center can be found adjacent to the commercial buildings on Amethyst Avenue and on residential side streets (Roberds Court, Roberds Street, Lomita Drive, La Vine Street, and Monte Vista Street) radiating out from Amethyst Avenue (Figs 6-9). The majority of these residences are modest single-family Craftsman, wood-frame vernacular and Spanish Colonial Revival bungalows constructed prior to 1930, although some were constructed later, and are typical of homes found throughout the City. Larger, two-story houses of varied architectural style are also present on Amethyst Avenue.

See Continuation Sheet

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.):

The Alta Loma NCA straddles the Pacific Electric Railway right-of-way (currently a designated local landmark and multi-use recreational trail) and is roughly bounded by 19th Street to the north, Base Line Road to the South, Amethyst Avenue and Archibald Avenue to the east, and Hellman Avenue to the west.

***D5. Boundary Justification:**

The Alta Loma NCA centers on historic residential and commercial development on Amethyst Avenue straddling the Pacific Electric Railway right-of-way (now a multi-use recreational trail). It contains a concentration of buildings constructed prior to 1945 and retains a strong sense of time and place as a town center situated on a rail line, dating from the turn of the twentieth century.

***D6. Significance: Context:** Acquisition of Land and Water (1877-1946) **Theme:** Acquisition of Land and Water (1877-1946) **Theme:** Flood Control (1862-1976); **Context:** Railroad Development and the Agriculture Industry (1887-1970) **Theme:** Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945) **Theme:** High Winds (1877-2009) **Theme:** Winemaking (1858-1970)

Period of Significance: 1880-1945 **Applicable Criteria:** A/1 & C/3 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

Clucas, Donald L. *Light Over the Mountain: A History of the Rancho Cucamonga Area*. Upland: California Family House, 1979.
Stoebe, Martha Gaines. *The History of Alta Loma, California, 1880-1980*. Rancho Cucamonga: City of Rancho Cucamonga, 2001.

***D8. Evaluator:** Jenna Snow with Kathryn McGee

Date: November 6, 2009

Affiliation and Address: Chattel Architecture, Planning & Preservation, Inc.,
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*Date: Nov. 6, 2009 Continuation Update

Continued from D3. Detailed Description...

Contributing resources to the Alta Loma NCA include single-family residences constructed prior to 1945 and retaining some degree of architectural integrity and/or constructed with local arroyo/field stone; buildings, such as schools, commercial buildings, churches, offices and community facilities constructed prior to 1945, possessing a clear linkage to early town center development or a strong relationship to the Pacific Electric Railway right-of-way, and retaining some degree of architectural integrity; previously designated historic resources significant for their contribution to early town center development; cultural landscape features such as windrows, vineyards, citrus groves, and stone curbs. Note that historic buildings constructed in the Alta Loma NCA prior to 1880 or after 1945 or with a low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to early town center development.

Continued from D6. Significance...

In 1880, Pasadena-based horticultural land developer Adolph Petsch and a group of associates purchased 160 acres of land in northern Alta Loma from a man named Henry Reed,¹ and named the land Hermosa. They also purchased the water rights to nearby Deer and Adler Canyons and formed the Hermosa Land and Water Company in 1881. In 1883, they purchased more land in present-day Alta Loma, establishing the "Iowa Tract" on 500 acres. The Iowa Tract was joined with Hermosa in 1887 and the entire area was renamed loamosa. The Hermosa Land and Water Company was incorporated in the same year to handle the consolidated land holdings, which mounted to over 700 acres. Petsch and the Hermosa Land and Water Company were able to sell lands quickly because of their ability to supply each parcel with a dependable supply of water, using a method of irrigation similar to that which was being used in Etiwanda. The Alta Loma area produced high quantities of citrus fruits, including lemons, oranges, and grapefruit beginning in the 1880s and continued to grow citrus on a large scale for the next 60 years.² loamosa was renamed Alta Loma when colonists determined that a new town should be built along the incoming Pacific Electric Railway in 1913.

The loamosa Colony obtained its current name, Alta Loma, around the year 1913 when colonists determined that a new town should be built along the incoming PE Railway in order to take advantage of opportunities associated with proximity to a major rail line, which would pass through loamosa and on to neighboring Etiwanda. Captain Peter A. Demens, along with a committee of loamosa colonists, worked hard to encourage development of a rail line, declaring that the railroad should come through loamosa, as opposed to other neighboring communities, because a significant portion (over two-thirds) of citrus crops in Rancho Cucamonga were being grown in loamosa, distinguishing loamosa from Cucamonga and Etiwanda, which grew mostly grapes.³ Once constructed, a boom in development occurred along the PE Railway in Alta Loma. Four packing houses, loamosa Foothill Building, Alta Loma Warehouse, Hillside Groves Packinghouse, and American Fruit Growers Packinghouse were quickly erected following completion of the railway.⁴ Alta Loma continued to prosper as an agricultural community until the 1950s and 1960s, when postwar residential tracts and contemporary development began to overtake the local agricultural industry.

As the town of Alta Loma developed surrounding the Pacific Electric right-of-way, with the majority of its commercial and residential buildings are located on and immediately adjacent to Amethyst Avenue, which runs north-south through Alta Loma (Figs 1-5). Alta Loma also retains a concentration of historic houses with arroyo/field stone construction and/or detailing, a common construction technique in Rancho Cucamonga because of the ample supply of stone in the area (Fig 9). Many of the extant historic stone homes in the City are located in Alta Loma, with a

¹ In 1875, Mr. Henry Reed, a settler from Missouri, purchased the 160 acres of land and water rights to Deer Canyon and its tributaries (later sold to Adolph Petsch) from Mr. William Whitfield, a settler who came to California at an unknown date (in the mid-1800s), settling in Etiwanda prior to Isaias Hellman's purchase of land in the Cucamonga area. After settling in Etiwanda, Whitfield purchased the same 160 acres of land (later sold to Petsch), becoming the first settler in the area to purchase land from the Cucamonga Homestead Association (Stoebe, 3-4).

² Ibid., 24.

³ Clucas, 179.

⁴ Ibid., 181.

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Continued from D6. Significance...

... concentration on Hillside Road. The Demens-Tolstoy House (1890), located at 9686 Hillside Road in Alta Loma, is an exemplary representations of local stone architecture. The Alta Loma NCA also contains significant cultural landscape features, such as windrows, stone curbs, vineyards and citrus groves, and open space that contribute to the character of the town. As a result, preservation of these cultural landscape features should be integral to preservation of the Alta Loma NCA. To this end, the City has already designated as a local landmark historic walnut trees, planted in the 1930s and 1940s, lining Beryl Street north of Hillside Road in Alta Loma (Parcel No. 1061-371-26, 27, 28, 29, 31 and 40). The period of significance for the NCA ends in 1945 because the majority of extant buildings associated with early town center development had been constructed by the mid-1940s; postwar development in the area after 1945 did not contribute to the contexts and themes associated with Alta Loma development.

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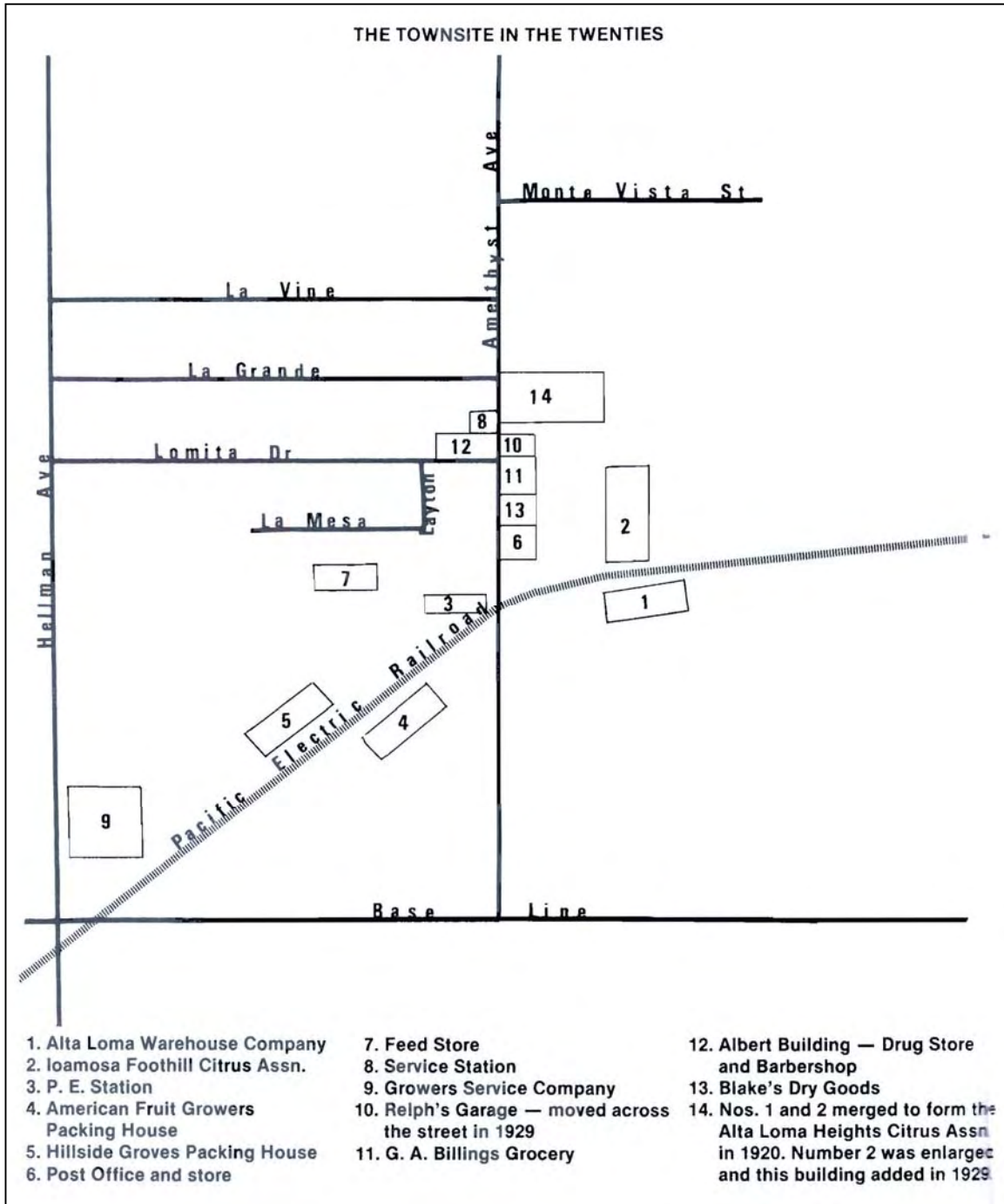


Fig. 1: Map of Alta Loma Townsite in 1920s (Stoebe, Martha Gaines. *The History of Alta Loma, California, 1880-1980*. Rancho Cucamonga: City of Rancho Cucamonga, 2001, 106).

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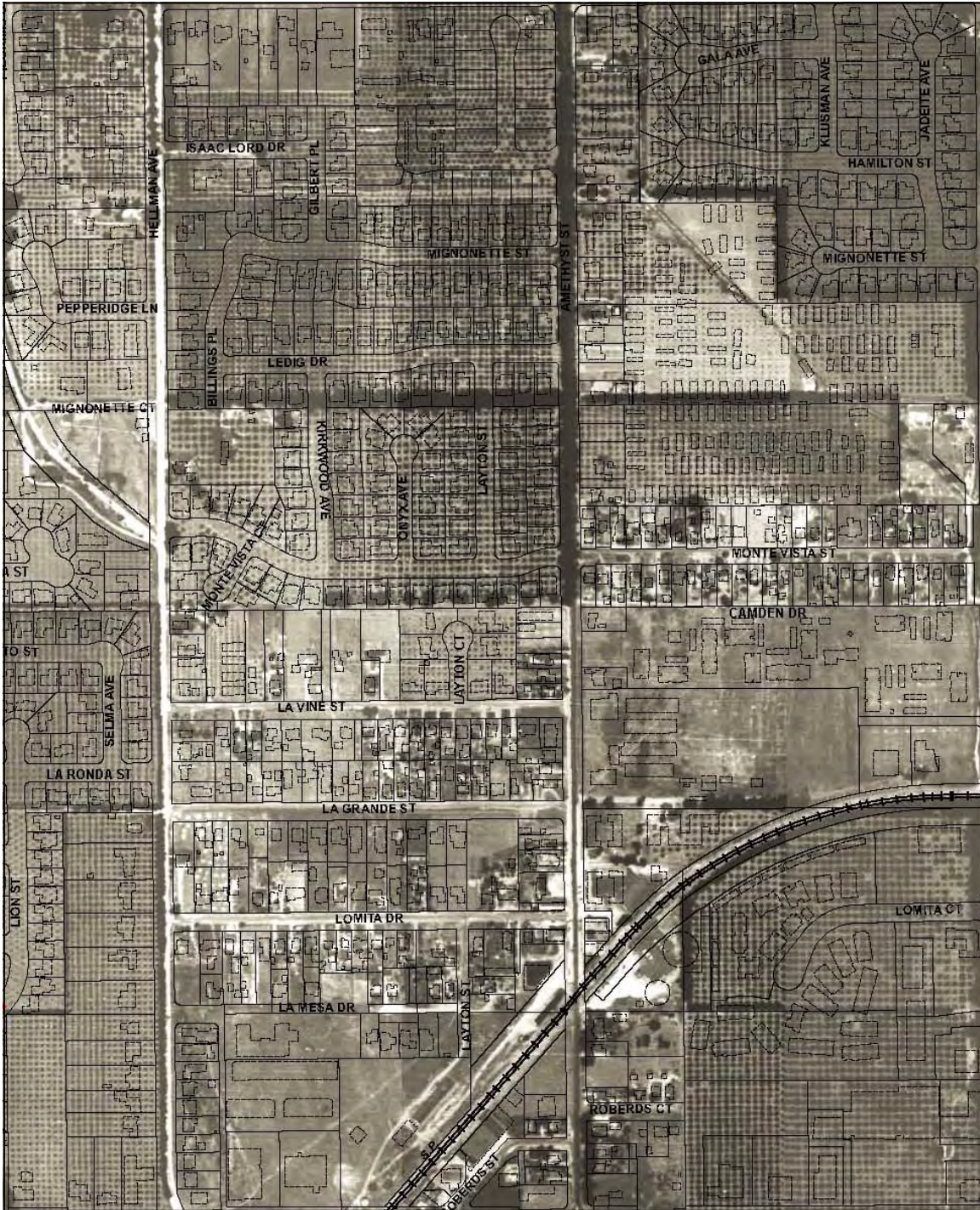


Fig. 2: 1938 aerial photograph of Alta Loma overlaid with current parcel map, focusing on development on and around Amethyst Avenue (note Pacific Electric Railway passing through southeast corner) (historic aerial: GeoSearch; map overlay: Hogle-Ireland, Inc.)

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*Date: Nov. 6, 2009 Continuation Update



Fig. 3: View of Alta Loma (1930s), showing Amethyst Avenue looking North, with Henry Albert building on left and (Stoebe, Martha Gaines. *The History of Alta Loma, California, 1880-1980*. Rancho Cucamonga: City of Rancho Cucamonga, 2001, 106; 125)



Fig. 4: View southeast showing north elevation of Alta Loma Fire Hall (constructed c. 1931) facing Amethyst, note commercial store (now demolished) between historic Roth's Store and Post Office (Ernie's Place) and Billings Store on Amethyst Avenue behind Fire Hall (photo taken c. 1960; source unknown)



Fig. 5: View northwest of Amethyst Avenue showing Alta Loma Fire Hall and Henry Albert Building (currently Dr. Strange Records) (left) and Roth's Store and Post Office (Ernie's Place) and Billings Store (right) (Chattel Architecture, 2009).

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*Date: Nov. 6, 2009 Continuation Update



Fig 6: Alta Loma, 9416 La Mesa (1927), typical Pueblo Revival house in Alta Loma NCA (Chattel Architecture 2009)



Fig 7: Alta Loma, Roberd/Dishman/Klusman House, 7235 Amethyst Ave (1923) (Chattel Architecture 2009)



Fig 8: Alta Loma, 9421 La Mesa (1928), typical wood-frame house in Alta Loma NCA (Chattel Architecture 2009)



Fig 9: Alta Loma, typical example of stone construction in Alta Loma, located on south side of Hillside Road (Chattel Architecture 2009)

*Resource Name or # (Assigned by recorder): Etiwanda Neighborhood Character Area

D1. Historic Name: Etiwanda

D2. Common Name: Etiwanda

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

Situated in the western portion of the City of Rancho Cucamonga, straddling the Pacific Electric Railway right-of-way, the Etiwanda Neighborhood Character Area (NCA) includes historic architectural resources and cultural landscape features important to early development of the Etiwanda town site, which began around the year 1881. While coherence of the originally rural agricultural town has been interrupted by contemporary development, the I-10 and I-215 freeways, and the loss of historic resources, dividing the historic core of Etiwanda into 2 distinct portions, one situated north of Wilson Avenue and south of Summit Avenue / Banyan Street, and the other situated south of the I-210 Freeway and north of Baseline Road, Etiwanda still retains a sense of time and place. Specifically, Etiwanda retains its historic rural character, defined by cultural landscape features such as windrows, stone curbs and open space. Lack of integrity to individual properties keeps the area from appearing eligible as a potential historic district.

Contributing resources to the Etiwanda NCA include single-family residences constructed prior to 1945 and retaining a medium-high degree of architectural integrity; buildings, such as schools, churches, offices and community facilities constructed prior to 1945, possessing a clear linkage to early town center development and retaining a medium-high degree of architectural integrity; previously designated historic resources significant for their contribution to early town center development; cultural landscape features such as windrows, vineyards, citrus groves, and stone curbs. Note that historic buildings constructed in the Etiwanda NCA prior to 1881 or after 1945 or with a low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to early town center development.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.): The Etiwanda NCA straddles the Pacific Electric Railway right-of-way (currently a designated local landmark and multi-use recreational trail) and is roughly bounded by Baseline Road to the South, Summit Avenue / Banyan Street to the North, Etiwanda Ave to the West and East Avenue to the East.

***D5. Boundary Justification:**

The Etiwanda NCA contains a concentration of buildings constructed prior to 1945 and retains a sense of time and place as a turn of the twentieth century town center situated on a rail line.

***D6. Significance: Context:** Acquisition of Land and Water (1877-1946) **Theme:** Acquisition of Land and Water (1877-1946) **Theme:** Flood Control (1862-1976); **Context:** Railroad Development and the Agriculture Industry (1887-1970) **Theme:** Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945) **Theme:** High Winds (1877-2009) **Theme:** Winemaking (1858-1970)

Period of Significance: 1881-1945 **Applicable Criteria:** A/1 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

Clucas, Donald L. *Light Over the Mountain: A History of the Rancho Cucamonga Area.* Upland: California Family House, 1979.
Etiwanda: The First 100 Years. 1982.
Hickcox, Robert L. *A History of Etiwanda.* Etiwanda Historical Society, 1995.

***D8. Evaluator:** Jenna Snow with Kathryn McGee

Date: November 6, 2009

Affiliation and Address: Chattel Architecture, Planning & Preservation, Inc.,
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*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance

...The first European settlers came to the Etiwanda Colony, located in the eastern portion of Rancho Cucamonga, in the early 1860s.¹ Having made his fortune in the California gold mines, Captain Joseph S. Garcia (1823-1902) of the Azores Islands (located off the coast of Lisbon, Portugal), purchased a large amount of land in the Cucamonga Valley and, in 1881, sold off much of the land comprising Etiwanda—560 acres—to brothers George and William Chaffey for \$30,000. This purchase included Garcia's house and the water rights to local water sources, including Day Canyon and a creek to the east.² The Chaffey's made other land purchases in the Etiwanda area over time, eventually creating a tract of over 7,500 acres.³ They named the colony "Etiwanda" after an Indian chief who had been a friend of their uncle.⁴

The Chaffey's implemented an innovative system of gravity irrigation by subdividing their land into 10-acre blocks and creating a network of cement pipes that distributed water evenly to each land parcel (Fig 1-2). They created the Mutual Water Company in 1882 (later renamed the Etiwanda Water Company) organized around the notion that company members share equally in available water, allowing land owners furthest from the local water source to retain a share of water equal to that of land owners nearest the water source. The Chaffey's system of gravity irrigation and equal access to water was revolutionary for its time and their land sold quickly.⁵ The brothers went on to successfully develop similar irrigation systems in the neighboring community of Ontario and then in areas of Australia in the mid- to late-1880s.⁶

The completion of the Santa Fe Railway through the Cucamonga Valley in 1887 created enhanced opportunities for agriculture in early Etiwanda. Although residents of Etiwanda were frustrated that the Santa Fe depot was established three-quarters of a mile east of their town, improved transportation throughout the region still offered greater ease of transporting agricultural goods via railway and the agriculture industry in Etiwanda flourished in the late 1880s. Etiwanda farmers produced a variety of crops, including grape vines, oranges, lemons, apricots, peaches, and pears.⁷

Following its initial boom in agriculture, the Etiwanda Colony grew and began to have needs of a small town (Fig 3). The Chaffey brothers oversaw the building of the first school in the Colony, located at the corner of Base Line and East Avenues, in 1883. A second, larger school building was erected in 1890 at the corner of Victoria and Etiwanda Avenues, replaced in 1912 by a larger red brick structure and replaced once more in 1938 with a fourth school building, a portion of which remains today.⁸ The first church, initially named the Congregational Church of Etiwanda and later renamed the Etiwanda Community Church, was founded in the late 1880s or early 1890s (exact date unknown).⁹ Reflecting the growing prosperity of the region, the first electric light to be illuminated in Southern California was turned on at the Garcia home in Etiwanda in 1882. Soon after, the Chaffey's began to install electric lights on posts lining Euclid Avenue in neighboring Ontario, each spaced one mile apart.¹⁰ In the same year, the Chaffey's installed a telephone line to San Bernardino.¹¹ The first telephone switching station in the area was built in Etiwanda in the early 1930s on the property of the Norton-Fisher House, located at 13103 Victoria Avenue. The station housed the automatic telephone dialing system for the Etiwanda area, remaining in use until 1953.¹²

While Cucamonga and Alta Loma town centers developed small commercial cores, Etiwanda developed in a more spread out, rural fashion, with cultural landscape features, such as windrows, stone curbs, vineyards and citrus groves, and open space defining the character of the town (Fig 6-8). From the late 1880s through the 1960s,

¹ *Etiwanda: The First 100 Years*, 3.

² *Ibid.*, 5.

³ *Ibid.*, 5.

⁴ Clucas, 203. The Indian chief appears to have been from the Michigan area.

⁵ *Ibid.*, 208-209.

⁶ *Ibid.*, 209.

⁷ Clucas, 211.

⁸ *Ibid.*, 212-213.

⁹ *Ibid.*, 212.

¹⁰ *Ibid.*, 216.

¹¹ Robert L. Hickcox. *A History of Etiwanda*. Etiwanda Historical Society, 1995, 6.

¹² Etiwanda Telephone Switching Station, State of California Department of Parks and Recreation Primary Record (DPR 523a form),

Recorded by Lori Shriver, Planning Aide, City of Rancho Cucamonga, 16 July 2003.

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance

... the most common property type in Etiwanda was single family homes, the majority of which lined Etiwanda and East Avenues, but were also present in residential enclaves adjacent to Pecan Avenue and Victoria Street, as well as scattered, tucked away within expanses of agricultural land, making single-family residence situated within a historic orchard or vineyard a significant property type. Other important property types included wineries, citrus packing houses, canneries, water acquisition and storage facilities, early electricity and telephone-related stations, and railroad-oriented buildings. Etiwanda Avenue also contains several historic homes that have been moved from their original locations to make room for new development. While original agricultural land has largely been replaced by postwar residential tracts, many of the Chaffey's early land subdivisions are evident today in the layouts of these later residential communities, which have clearly been inserted into the Chaffey's land subdivisions (Fig 4). Etiwanda has retained its alignment and association with the Pacific Electric Railway right-of-way and contains the only surviving train depot in the City of Rancho Cucamonga. The Etiwanda Railway Station (1914), a local historic landmark located at 7089 Etiwanda Avenue (Fig 5), is currently undergoing rehabilitation for reuse as a museum or community facility. The period of significance for the NCA ends in 1945 because the majority of extant buildings associated with early town center development had been constructed by the mid-1940s; postwar development after 1945 did not contribute to the contexts and themes associated with Cucamonga town center development.

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

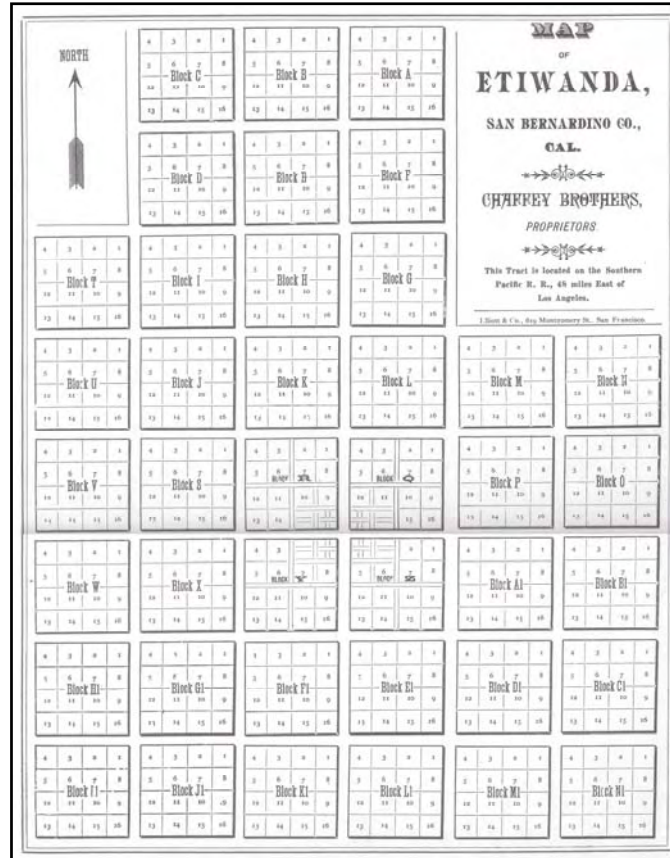


Fig. 1: Chaffey Brothers' map of Etiwanda Colony Lands, 1883 (Robert E. Ellingwood Model Colony History Room, City of Ontario Public Library)



Fig. 2: Aerial photo showing Etiwanda Colony Lands (upper middle), 1952 (*Etiwanda: The First 100 Years*. 1982, 50.)

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*Date: Nov. 6, 2009 Continuation Update

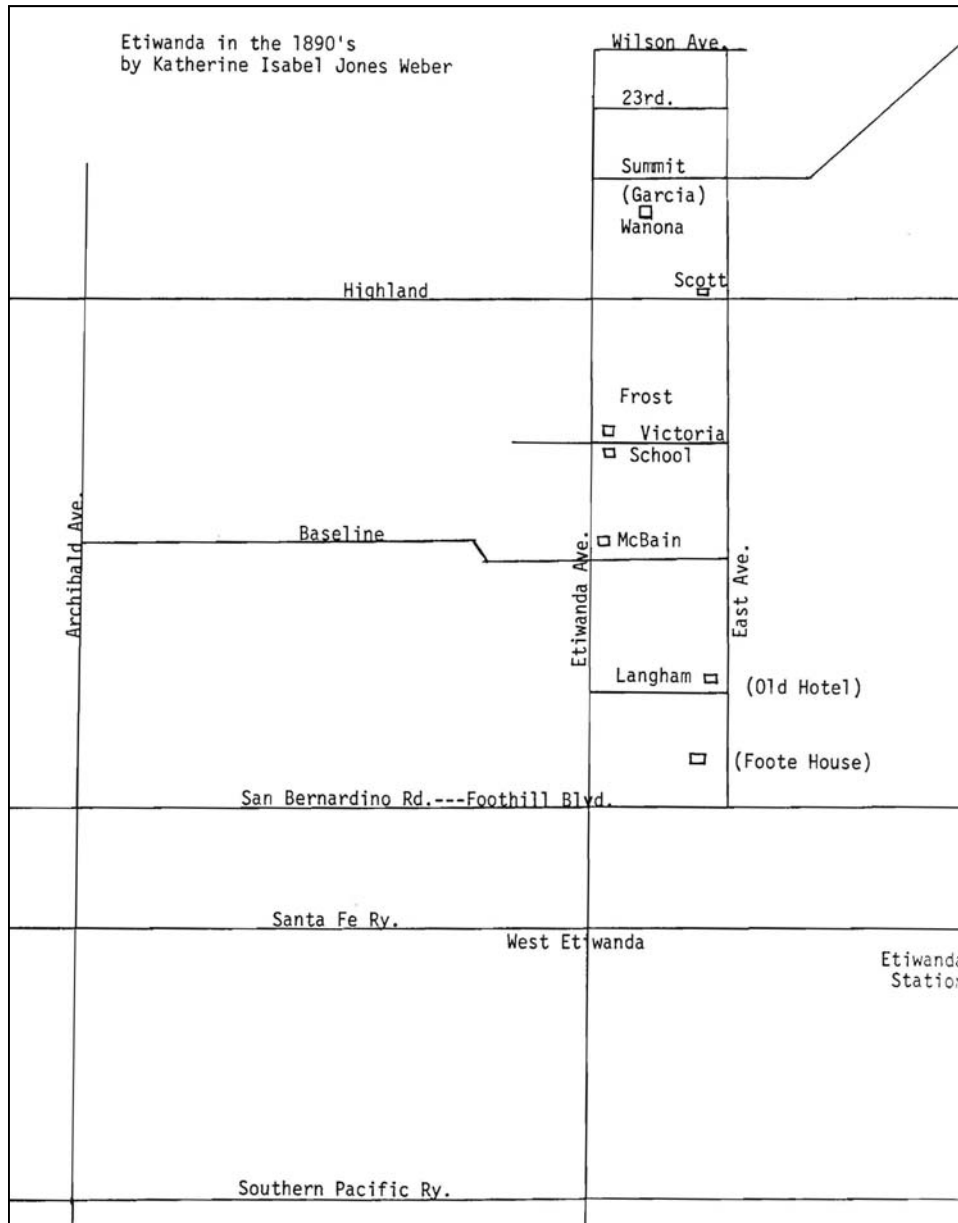


Fig. 3: Map of Etiwanda (1890s) showing development along Etiwanda Avenue (note: Pacific Electric Railway was constructed south of Victoria and north of Baseline in 1914) (Hickcox, Robert L. *A History of Etiwanda*. Etiwanda Historical Society, 1995, 254)

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*Date: Nov. 6, 2009 Continuation Update



Fig 5: Etiwanda train depot (Chattel Architecture 2009)



Fig 6: Etiwanda, Chaffey vineyard recreation located at south side of Victoria Street between Etiwanda Avenue and East Avenue (Chattel Architecture 2009)



Fig 7: Etiwanda, Citrus grove located at 6060 Summit Lane between Banyan Street and 23rd (Chattel Architecture 2009)



Fig 8: Etiwanda, Home and citrus grove located at 13008 Banyan Street (Chattel Architecture 2009)

*Resource Name or # (Assigned by recorder): Red Hill Neighborhood Character Area

D1. Historic Name: Red Hill

D2. Common Name: Red Hill

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

Comprised of an eclectic mix of architect-designed, single-family homes, Red Hill contains a variety of architectural styles dating from the early 1900s through present-day, including Spanish Colonial Revival, Colonial Revival, Mid-Century Modern, Swiss Chalet Ranch and Post-and-Beam, among others. Recent development in the neighborhood tends to be Post-Modern in style, although many of the newer homes are out-of-scale with surrounding historic development, frequently unresponsive to neighborhood setbacks, curb style and height, size of house and garage in relation to the site, massing of architectural features and topography. Despite the varied mix of historic and contemporary architectural styles and intrusion of out-of-scale construction, Red Hill retains a sense of identity as an elite residential community of unique, high-quality homes and should be considered a NCA for its distinct sense of place and strong relationship to local history. Homes on Red Hill are generally responsive to the topography, with some residences situated below the road and some on a slope above the road, depending on positioning of each parcel to the street. For example, many of the early ranch style homes on Red Hill constructed in the 1940s and 1950s have sprawling floor plans that "hug" the hillside. The Red Hill NCA may contain a collection of properties eligible for listing as a National Register Historic District, although an intensive-level survey of properties on Red Hill would need to be performed to determine boundaries of this area.

Contributing resources to the Red Hill NCA includes single-family residences constructed prior to 1959 (arbitrary 50-year cut-off) and retaining a medium-high degree of architectural integrity; previously designated historic resources significant for their contribution to early town center development. Note that historic buildings constructed in the Red Hill NCA after 1959 or with a low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to early neighborhood development or retain scale and character mimicking that of surrounding resources.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.): The Red Hill NCA is roughly defined as the area bounded by the Red Hill Country Club and golf course to the west, Carnelian Street to the east, Route 66 to the south, and Baseline Road to the north.

***D5. Boundary Justification:**

The Red Hill neighborhood has historically and is currently confined to the hill area; The boundary for the Red Hill NCA is drawn to include homes located on the hill. As Red Hill is comprised mostly of large-scale, single-family residences constructed over a long period of time in a variety of architectural styles, the character of the neighborhood is defined by its very nature as an eclectic grouping of architecturally significant homes and is also characterized by neighborhood design features that tie these varied architectural types together, such as scale and massing of homes, setbacks, curb height and style, sidewalks, landscaping, and general relationship of homes to the road and hillside topography.

***D6. Significance: Context:** Early Settlement (1811-1876); **Context:** Railroad Development and the Agriculture Industry (1887-1970) **Theme:** Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945); **Context:** Postwar Development (1945-1977)

Period of Significance: 1839-1959 **Applicable Criteria:** A/1 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.): Donald L. Clucas. *Light Over the Mountain*. Upland: California Family House Publishers, 1979, 70.

***D8. Evaluator:** Robert Chattel with Kathryn McGee **Date:** November 6, 2009
Affiliation and Address: Chattel Architecture, Planning & Preservation, Inc.,
13417 Ventura Boulevard, Sherman Oaks, CA 91423

CONTINUATION SHEET

*Recorded by: Jenna Snow with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance

Originally inhabited by Indian tribes, the City of Rancho Cucamonga has been a center of land development opportunity since Franciscan priests and Spanish soldiers entered and began their occupation of the area in the late 18th century. The name "Cucamonga," a Shoshone word for "sandy place," first appeared in a written record of the San Gabriel Mission dated 1811. As a result of the secularization of the missions in 1831, the land owned by the missions was divided into land grants, including the 13,000 acre Rancho Cucamonga, granted to Los Angeles City Council president and businessman Tiburcio Tapia in 1839. The Rancho Cucamonga was defined by El Camino Real on its southern border, the San Gabriel Mountains to the north, the San Antonio Creek to the west and present-day Etiwanda Avenue to the east. Tapia built his home on the top of visually prominent Red Hill, planted some of Rancho Cucamonga's first vineyards, and built a small winery, which would later be enlarged and reestablished as the Thomas Winery in 1933 and then again as the Filippi Vineyards winery in 1967.¹ Developing in parallel with development of Cucamonga, Alta Loma and Etiwanda and situated on a visually prominent hill in the western portion of the City, Red Hill was historically and is currently Rancho Cucamonga's elite residential neighborhood.

¹ Donald L. Clucas. *Light Over the Mountain*. Upland: California Family House Publishers, 1979, 70.

*Resource Name or # (Assigned by recorder): Route 66 Bear Gulch Neighborhood Character Area

D1. Historic Name: Bear Gulch

D2. Common Name: Bear Gulch

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.): Situated in the western portion of the City of Rancho Cucamonga, located immediately south of the Red Hill neighborhood, the Route 66 Bear Gulch Neighborhood Character Area (NCA) includes historic resources significant for their association with Route 66 in Rancho Cucamonga. While coherence of Route 66 throughout the City has been interrupted by the intrusion of contemporary development and the demolition of historic resources, the Bear Gulch area of Route 66 still retains a sense of time and place as an enclave of Route 66 resources. Buildings constructed on Foothill Boulevard in the Bear Gulch area prior to 1926 or after 1959 or with a low degree of architectural integrity may still be contributing resources to the NCA if they have a strong connection to development of the Route 66 Bear Gulch NCA. Lack of integrity to individual properties keeps the area from appearing eligible as a potential historic district.

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.): Situated immediately south of Red Hill, the Route 66 Bear Gulch NCA sits within a curved portion of Foothill Boulevard. It contains a small grouping of Route-66 related resources, roughly bounded by the Sycamore Inn to the east, Grove Avenue to the west, and Foothill Boulevard to the south and north.

***D5. Boundary Justification:**

The Route 66 Bear Gulch NCA contains a concentration of buildings constructed during the period of significance (1926-1970) established for Route 66-related historic resources in Rancho Cucamonga, while other historic resources significant for their association with Route 66 are largely scattered throughout the City. The National Park Service establishes the nationwide period of significance for Route 66 resources as 1926-1970, as Route 66 was officially commissioned nationwide in 1926 and had significance as a roadway until c. 1970, although it was not decommissioned nationwide until 1985.

***D6. Significance: Context:** Route 66 (1926-1970) **Theme:** Route 66 (1926-1970)

Period of Significance: 1926-1959 **Applicable Criteria:** A/1 (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

Completed across the United States in the late 1930s, United States Highway 66 (Route 66) resulted from a nationwide effort to create a highway linking small towns and larger cities from Chicago to Los Angeles. Route 66 is located along Foothill Boulevard running east-west through Rancho Cucamonga and contains historic resources significant for their association with Route 66, such as the locally designated Richfield Oil Station (Fig 3), located at 9670 Foothill Boulevard, and the Magic Lamp restaurant (Fig 2), located at 8189 Foothill Boulevard. Aided by the financial backing and large-scale organization of the Federal Aid Road Act of 1916 and the Federal Highway Act of 1921, Route 66 (also referred to as "The Mother Road") was commissioned in 1926. Nationwide prosperity following WWII afforded many people the opportunity to travel for leisure and automobile excursions west on Route 66 quickly evolved into a cultural...

See Continuation Sheet

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

Repp, Thomas Arthur. *Route 66: The Romance of the West*. Lynnwood: Mock Turtle Press, 2002, 9.
Michael Cassity. *Route 66 Corridor National Historic Context Study*, National Park Service, 2004, vi.

***D8. Evaluator:** Robert Chattel with Kathryn McGee

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*Recorded by: Robert Chattel with Kathryn McGee

*Date: Nov. 6, 2009 Continuation Update

Continued from D6. Significance:

...phenomenon. It attracted a multitude of tourists anxious to see the West and visit the interesting roadside businesses that had sprung up alongside Route 66, appealing to the tourist market with an array of food and refreshment options, trading posts, references to Native American culture, and more obscure sources of entertainment, such as snake pits, petting zoos, and exotic carnival games.¹ The popularity of Route 66 indirectly led to its demise and ultimately to its decommissioning in 1985.² Experiencing heavy traffic during WWII by tourists and the trucking industry, it became crowded and fell into disrepair.³ In addition, beginning in the 1950s, modern highways and interstate systems were built throughout the nation, often bypassing small towns that had grown dependent on Route 66 travelers for business. Despite the dramatic decline in traffic, some Route 66 businesses endured, developing a cult following of travelers anxious to experience the mystic Route 66 as it once was.⁴

The section of Route 66 running through Rancho Cucamonga contains a small collection of scattered historic resources potentially significant for their association with Route 66. However, modern developments on Foothill Boulevard have interrupted the continuity and sense of time and place necessary for designation of a Route 66 historic district in the City, although a small cluster of historic resources is located in the Bear Gulch area along Foothill Boulevard in the western portion of the City. Other local historic resources potentially significant for their association with Route 66 tend to be scattered and include single-family homes and small commercial establishments. Resources that contribute to the NCA include but are not limited to: Sycamore Inn, 8318 Foothill Boulevard (1921), Foothill Liquor (Fig 1), 8161 Foothill Boulevard (c. 1946), Magic Lamp (Fig 2), 8189 Foothill Boulevard (1941, remodeled and expanded 1956-57), Red Hill Coffee Shop, 8111 Foothill Boulevard (c. 1945-50), and the Route 66 right-of-way.

The National Park Service identifies the following property types associated with Route 66 for purposes of identification of properties for listing in the National Register of Historic Places: (1) Roadbeds, (2) Road Bridges, (3) Gasoline / Service Stations, (4) Garages / Dealerships, (5) Restaurants / Diners, (6) Motels / Tourist Courts, (7) Recreation / Travel Stops / Destinations, and (8) Roadside Parks / Picnic Areas / Markers. The established period of significance for these property types is 1926-1970.⁵ While the period of significance begins in 1926, properties constructed on Route 66 prior to 1926 can still be significant for their association with Route 66 if they have taken on significance over time as a Route 66-related resource. For example, the Sycamore Inn was constructed in 1921 but over time became an important Route 66 destination and as such would be considered a contributor to the Route 66 Bear Gulch NCA. The period of significance for Route 66 Bear Gulch NCA contributors ends in 1959, an arbitrary 50-year cut-off commonly used to identify significant historic resources.

¹ Thomas Arthur Repp. *Route 66: The Romance of the West*. Lynnwood: Mock Turtle Press, 2002, 9.

² Michael Cassity. *Route 66 Corridor National Historic Context Study*, National Park Service, 2004, vi.

³ *Ibid.*, 236.

⁴ *Ibid.*, vi.

⁵ Cassity, vii.

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*Date: Nov. 6, 2009 Continuation Update



Fig 1: Foothill Liquor, 8161 Foothill Boulevard (c. 1945) (Chattel Architecture 2009)



Fig 2: Magic Lamp, 8189 Foothill Boulevard (constructed 1941, elaborately remodeled 1956-57) (Chattel Architecture 2009)



Fig 3: Cucamonga Service Station, 9670 Foothill Boulevard (formerly Richfield Oil Station (1915) (Chattel Architecture 2009)



Fig 4: New Kansan Motel, 9300 Foothill Boulevard (1945) (Chattel Architecture 2009)

City of Rancho Cucamonga

Historic Context Statement

REVISED DRAFT

Prepared by Chattel Architecture, Planning & Preservation, Inc. for the
City of Rancho Cucamonga, California

October 2, 2009

TABLE OF CONTENTS

Introduction	3
Context: Early Settlement (1811-1876).....	3
Context: Acquisition of Land and Water (1877-1946).....	4
<i>Theme: Acquisition of Land and Water (1877-1946)</i>	4
<i>Theme: Chinese Immigrant Workers (1880-1900)</i>	6
<i>Theme: Flood Control (1862-1976)</i>	7
Context: Railroad Development and the Agriculture Industry (1887-1970)	7
<i>Theme: Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945)</i>	7
<i>Theme: High Winds (1877-2009)</i>	9
<i>Theme: Winemaking (1858-1970)</i>	10
Context: Route 66 (1926-1970)	11
Context: Postwar Development (1945-1977).....	12
Context: Consolidation and Incorporation (1977-2009)	13
References	14

Historic Context Statement for the City of Rancho Cucamonga, California

INTRODUCTION

Situated at the base of the San Gabriel Mountains in San Bernardino County, the City of Rancho Cucamonga is a bustling metropolis located approximately 45 miles east of Los Angeles and 40 miles northeast of Orange County. It was incorporated in 1977, consolidating the three towns of Cucamonga, Alta Loma and Etiwanda into one municipality. Given its fertile soil, temperate climate, and access to an ample supply of water, agriculture developed as the main industry in Rancho Cucamonga beginning in the latter half of the 19th century, when farmers and vintners began producing a variety of crops, particularly citrus fruits and grapes for wine-making. Although the local agriculture industry has changed over time due to a variety of factors, including technological advancement and transportation improvements, agriculture remains a recognizable, although fading, feature of Rancho Cucamonga's physical landscape.

Having recently undergone the rapid population growth characteristic of many cities in the Inland Empire, Rancho Cucamonga's population grew about 10 percent, or, 15,000 people, between 2003 and 2005;¹ as of January 2009, it boasts a population of 177,736. While the rate of population increase has lessened somewhat in recent years, it is predicted that the number of people living in San Bernardino County will increase by approximately one million people by the year 2030.² Reflecting this trend, the rapidly expanding urban environment has consumed much of the agricultural land that once characterized the area. As it is a goal of the General Plan to determine the best path for future growth, it is appropriate to consider how the City's significant historic resources, including non-architectural resources such as historic landscapes, will be preserved in the face of urban growth and change. The following narrative contains a developmental history of the City of Rancho Cucamonga, organized by significant historic contexts and themes. It is not meant to be the definitive history of the City but rather a tool for evaluation of historic resources.

CONTEXT: EARLY SETTLEMENT (1811-1876)

Originally inhabited by Indian tribes, the City of Rancho Cucamonga has been a center of land development opportunity since Franciscan priests and Spanish soldiers entered and began their occupation of the area in the late 18th century. The name "Cucamonga," a Shoshone word for "sandy place," first appeared in a written record of the San Gabriel Mission dated 1811. As a result of the secularization of the missions in 1831, the land owned by the missions was divided into land grants, including the 13,000 acre Rancho Cucamonga, granted to Los Angeles City Council president and businessman Tiburcio Tapia in 1839. The Rancho Cucamonga was defined by El Camino Real on its southern border, the San Gabriel Mountains to the north, the San Antonio Creek to the west and present-day Etiwanda Avenue to the east. Tapia built his home on the top of visually prominent Red Hill, planted some of Rancho Cucamonga's first vineyards, and built a small winery, which would later be enlarged, and then reestablished as the Thomas Winery in 1933 and then again as the Filippi Vineyards winery in 1967.³

¹ The County population increased by only 5.74 percent during the same time (2008 Regional Transportation Plan Growth Forecast, Southern California Association of Government (SCAG)).

² Ibid.

³ Donald L. Clucas. *Light Over the Mountain*. Upland: California Family House Publishers, 1979, 70.

Upon the death of Tapia in 1845, Tapia's daughter, Maria Merced Tapia de Prudhomme, became the sole heir of the Rancho Cucamonga. Maria Merced's husband, Leon Victor Prudhomme, assumed control of the rancho and eventually sold it to John Rains in 1858. Rains significantly expanded the vineyards, planting approximately 125,000 to 150,000 vines. He was found murdered in 1862 and soon after his death, his widow, Dona Maria Merced Williams de Rains, inherited the ranch property. She encountered financial problems and the property fell into foreclosure, ultimately marking the close of the rancho way of life in the Cucamonga region.

CONTEXT: ACQUISITION OF LAND AND WATER (1877-1946)

Theme: Acquisition of Land and Water (1877-1946)

Development of the three towns of Cucamonga, Alta Loma, and Etiwanda began in the late 1870s and 1880s as a direct result of acquisition and distribution of land and water and the availability of rail transit through the region. Following Native American occupation of the Cucamonga Valley, the earliest documented use of local water sources was by Tiburcio Tapia at his winery, utilizing water from Cucamonga Creek. Efforts to bring water to Etiwanda and Alta Loma were successful in the early 1880s, while a reliable supply was not brought to Cucamonga until 1887.



Figure 1: View of Cucamonga Valley vineyards looking north, 1942 (Los Angeles Public Library)

Cucamonga: In 1870, Jewish immigrant Isaias Hellman, a prominent Los Angeles businessman and one of the original 23 founders of the Farmers and Merchants Bank in Downtown Los Angeles, along with several of his associates, came into ownership of the Rancho Cucamonga at a cost of approximately \$50,000.⁴ They immediately sold a small amount of the land, turning a quick profit, and kept the remaining 8,000 acres. Under a newly-formed partnership, Cucamonga Company (later

⁴ Sources differ slightly in their descriptions of how Hellman obtained the rancho. Stoebe states that as president of the Farmers and Merchants Bank in Los Angeles, Isaias W. Hellman had given the Rains Family their mortgage on the rancho property and that Hellman ultimately foreclosed on the mortgage and obtained title to the entire property on May 9, 1871 (Martha Gaines Stoebe. *History of Alta Loma, California, 1880-1980*. Rancho Cucamonga: City of Rancho Cucamonga, 2001, 3). Clucas, on the other hand, simply states that Hellman purchased the ranch for \$49,000 in 1871 (Clucas, 48). Also differing slightly, Dinkenspiel writes that the rancho was sold in a sheriff's auction in 1870 and that Isaias purchased the land for \$49,819. He does not directly state that Isaias purchased the land at the auction, only that the land was purchased at an auction (Frances Dinkenspiel. *Towers of Gold: How One Jewish Immigrant Named Isaias Hellman Created California*. New York: St. Martin's Press, 2008, 102).

Cucamonga Vineyard Company), Hellman and his associates subdivided the residual acreage, planted it with a variety of crops, and oversaw restoration of the local vineyards, the result of which made Cucamonga Valley “the biggest winemaking estate in California.”⁵ Some Cucamonga Company lands were sold, ultimately comprising portions of Alta Loma and Etiwanda.⁶ A dramatic effort was undertaken tunneling horizontally into Cucamonga Canyon in the San Gabriel Mountains to the north to access water from natural springs in the mountains, utilizing local Chinese immigrants as the majority of the labor force for this project. Water was delivered to Cucamonga in 1887.⁷

Etiwanda: The first European settlers came to the Etiwanda Colony, located in the western portion of Rancho Cucamonga, in the early 1860s.⁸ Having made his fortune in the California gold mines, Captain Joseph S. Garcia (1823-1902) of the Azores Islands (located off the coast of Lisbon, Portugal), purchased a large amount of land in the Cucamonga Valley and, in 1881, sold off much of the land comprising Etiwanda—560 acres—to brothers George and William Chaffey for \$30,000. This purchase included Garcia’s house and the water rights to local water sources, including Day Canyon and a creek to the east.⁹ The Chaffey family made other land purchases in the Etiwanda area over time, eventually creating a tract of over 7,500 acres.¹⁰ They named the colony “Etiwanda” after an Indian chief who had been a friend of their uncle.¹¹

The Chaffey family implemented an innovative system of gravity irrigation by subdividing their land into 10-acre blocks and creating a network of cement pipes that distributed water evenly to each land parcel. They created the Mutual Water Company in 1882 (later renamed the Etiwanda Water Company) organized around the notion that company members share equally in available water, allowing land owners furthest from the local water source to retain a share of water equal to that of land owners nearest the water source. The Chaffey family’s system of gravity irrigation and equal access to water was revolutionary for its time and their land sold quickly.¹² The brothers went on to successfully develop similar irrigation systems in the neighboring community of Ontario and then in areas of Australia in the mid- to late-1880s.¹³

Alta Loma: In 1880, Pasadena-based horticultural land developer Adolph Petsch and a group of associates purchased 160 acres of land in northern Alta Loma from a man named Henry Reed,¹⁴ naming the land Hermosa. They also purchased the water rights to nearby Deer and Adler Canyons and formed the Hermosa Land and Water Company in 1881. In 1883, they purchased more land in present-day Alta Loma, establishing the “Iowa Tract” on 500 acres. The Iowa Tract was joined with Hermosa in 1887 and the entire area was renamed Iomosa. The Hermosa Land and Water Company was incorporated in the same year to handle the consolidated land holdings, which amounted to over 700 acres. Petsch and the Hermosa Land and Water Company were able to sell lands quickly because of their ability to supply each parcel with a dependable supply of water, using a method of irrigation

⁵ Dinkelspiel, 102.

⁶The Hellmans sold the land that would later comprise Alta Loma to the Cucamonga Homestead Association, which was created in 1874.

⁷ Clucas, 61.

⁸ *Etiwanda: The First 100 Years*, 3.

⁹ *Ibid.*, 5.

¹⁰ *Ibid.*, 5.

¹¹ Clucas, 203. The Indian chief appears to have been from the Michigan area.

¹² *Ibid.*, 208-209.

¹³ *Ibid.*, 209.

¹⁴ In 1875, Mr. Henry Reed, a settler from Missouri, purchased the 160 acres of land and water rights to Deer Canyon and its tributaries (later sold to Adolph Petsch) from Mr. William Whitfield, a settler who came to California at an unknown date (in the mid-1800s), settling in Etiwanda prior to Isaias Hellman’s purchase of land in the Cucamonga area. After settling in Etiwanda, Whitfield purchased the same 160 acres of land (later sold to Petsch), becoming the first settler in the area to purchase land from the Cucamonga Homestead Association (Stoebe, 3-4).

similar to that which was being used in Etiwanda. The Alta Loma area produced high quantities of citrus fruits, including lemons, oranges, and grapefruit beginning in the 1880s and continued to grow citrus on a large scale for the next 60 years.¹⁵ Loamosa was renamed Alta Loma when colonists determined that a new town should be built along the incoming Pacific Electric Railway in 1913.

Theme: Chinese Immigrant Workers (1880-1900)

Mid-19th century immigrants to the United States became an essential component of the labor force throughout the country and in California in particular.¹⁶ Chinese immigrants comprised a significant—and essential—portion of the working class in many American cities, working as railroad builders, laborers, merchants, servants, miners, waiters, and more.¹⁷ While the Gold Rush of 1848 was the initial force that drew Chinese immigrants to California, the need for laborers to build railroads and dig tunnels for water created an ample supply of work that kept Chinese immigrants in the area for the latter half of the 19th century and into the beginning of the 20th century.¹⁸ In 1885, the local agriculture industry in Rancho Cucamonga began to require greater investment in securing local water sources and Chinese workers became the primary labor force responsible for dredging and constructing tunnels (still in use today) under stream beds to access water.¹⁹ Approximately 700 Chinese immigrants resided in Rancho Cucamonga by 1890,²⁰ living together in a settlement known locally as “Chinatown,” which consisted of 12 houses clustered together along the south side of San Bernardino Road between Hellman Avenue and what is now Klusman Avenue.²¹ The majority of the Chinese left Rancho Cucamonga after 1890 and had almost entirely vacated the region by about 1920.²² The United States Census reports approximately 57 Chinese living in Cucamonga in 1900 and almost no Chinese living in either Cucamonga or Etiwanda by 1930, although these figures do not include residents of Alta Loma.²³

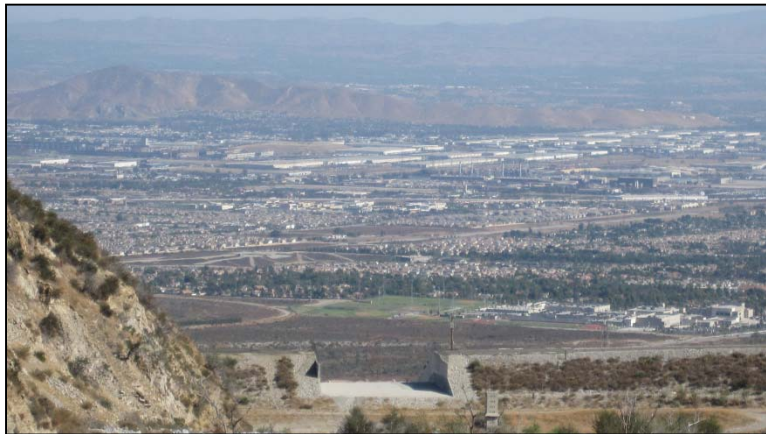


Figure 2: View from water channel in San Gabriel Mountains south into Cucamonga Valley, 2009 (Chattel Architecture)

¹⁵ Stoebe, 24.

¹⁶ Richard A. Walker. *California's Golden Road to Riches: Natural Resources and Regional Capitalism, 1848-1940*, Annals of the Association of American Geographers, Vol. 91, No. 1 (Mar., 2001), 167-199, 180.

¹⁷ In his book on Chinese agricultural workers in California in 1860-1910, author Sucheng Chan summarizes, “Though the Chinese who earned a living in agriculture on a regular basis never numbered more than six or seven thousand and represented only 10 to 15 percent of the total Chinese population in the state, even at the height of their prosperity in the last two decades of the nineteenth century, they played an important role in the development of California agriculture, and the nature of that involvement, in turn, influenced the evolution of Chinese communities in rural California” (Sucheng Chan. [This Bittersweet Soil: The Chinese in California Agriculture, 1860-1910](#). Berkeley: University of California press, 1986, 1-2.).

¹⁸ Bernice Conley. *Pages from the Past*. “Nationalities abound Locally,” July 27, 1980.

¹⁹ Clucas, 61.

²⁰ Conley. “Nationalities abound Locally,” July 27, 1980.

²¹ Clucas, 84.

²² Conley. “Nationalities abound Locally,” July 27, 1980.

²³ Chan, 1-2. Note: population figures for Chinese may be understated.

Theme: Flood Control (1862-1976)

Given its location in an alluvial fan at the base of the San Gabriel Mountains, Rancho Cucamonga has historically been prone to flooding from water rushing down the hillside. Major flooding in the City is recorded as occurring in the years 1862, 1914, 1927, 1938, 1943, and 1969, although the first measurement for Cucamonga Creek and its floods did not occur until 1927.²⁴ Early flood control strategies included construction of storm drains, and formation of a storm water district to include the whole of Cucamonga Valley. As a result of the 1914 flood, the earliest noted flood control works on Cucamonga Creek took place and included an interception ditch constructed by local ranchers to catch the overflow streams of Cucamonga Creek and carry them easterly to the main channel above 19th Street.²⁵ High stone curbs have also historically been used throughout the City as a flood control mechanism. During the Great Depression of the 1930s, a series of walls and structures were built in the foothills above the City by unemployed young men working at a Civilian Conservation Corps (CCC) camp as part of a Works Progress Administration (WPA) project. The 1969 flood caused an estimated \$13.5 million in damages.²⁶ In 1976, construction of a permanent flood control project for the confinement and control of Cucamonga Creek began and the estimated cost at the time of construction was \$100 million.²⁷

CONTEXT: RAILROAD AND AGRICULTURE DEVELOPMENT (1887–1970)

Theme: Town Development: Cucamonga, Alta Loma, and Etiwanda (1887-1945)

Construction of railroads through the Cucamonga Valley allowed for tremendous growth of the local agriculture industry, the success of land sales, and subsequent development of the towns of Cucamonga (including the North Town neighborhood), Alta Loma and Etiwanda. Similar to other Southern California boomtowns,²⁸ construction of railroads through the region created a rapid increase in local development, enabling both people and goods to move in and out of Rancho Cucamonga at what was for the time an unprecedented speed, which dramatically increased agricultural production and sales. From the early 1900s to the 1950s, the northern portion of the City's landscape consisted of mostly citrus groves while the southern portion was dominated by vineyards.²⁹

Cucamonga: The Town of Cucamonga has been identified as a boomtown built in anticipation of the Santa Fe Railway,³⁰ completed through the region in 1887. The availability of rail transit created a dramatic increase in the price of land sold in Cucamonga. The Cucamonga Fruit Land Company sold off parcels of land at high profit margins, selling parcels that in 1886 had been selling for \$70 per acre for \$150-\$250 dollars per acre just one year later in 1887.³¹ Subsequently, the local agriculture industry flourished during this time, with huge varieties of crops grown, including grapes, citrus, apricots, pears, peaches, olives, figs, walnuts, chestnuts, almonds, hay grain, and potatoes.³² A flurry of commercial

²⁴ San Bernardino County Flood Control District, "Cucamonga Creek, 1776-1976, After 200 Years," 8.

²⁵ Ibid., 10.

²⁶ Ibid., 22.

²⁷ Ibid., 22.

²⁸ Rail lines built in Southern California created a huge population boom in the region. The City of Los Angeles grew from 6,000 to over 50,000 people in the 20 year period from 1870 to 1890. The majority of cities incorporated in the Los Angeles area in the late 1800s experienced early growth due to availability of railways. (David Brodsky. "L.A. Freeway, An Appreciative Essay." Berkeley: University of California Press, 1981, 63; 68-69).

²⁹ Bob Hickcox. Rancho Cucamonga Oral History Project, Interview by Knox Mellon, 13 Dec 1991, Introduction.

³⁰ Brodsky, 67-68.

³¹ The Cucamonga Fruit Land Company was created in 1886 and in 1887 it purchased all previously unsold land of the Cucamonga Rancho (approximately 9,000 acres) (Clucas, 51; 60).

³² Ibid., 63.

development followed, including the opening of the North Cucamonga Hotel in 1889, with construction centered on what is today San Bernardino Road west of Archibald Avenue.³³

North Town: The North Town neighborhood, named for its position to the township of Guasti to the south,³⁴ is a historically Latino community that began along the Santa Fe Railway in the 1930s when Mexican immigrants began moving to the region looking for work during the Great Depression, eagerly answering the demand for agricultural laborers to pick grapes, maintain vineyards and work picking and packing citrus.³⁵ Located south of the original town center development of Cucamonga, North Town comprises approximately a square mile roughly bounded by the Santa Fe Railway to the south, Feron Street to the north, Archibald Avenue to the west and Haven Avenue to the east. The community was for a time a distinctly defined land area surrounded by vineyards, orchards, and empty fields on all sides.³⁶ In the early 1900s, several other Latino neighborhoods were located throughout the City, including a neighborhood on Monte Vista Street in Alta Loma and one on Base Line Avenue in Etiwanda, where the I-15 Freeway now passes through the City.³⁷ Mexican immigrants also lived in Guasti, a self-contained wine company town located south of North Town, currently in the neighboring City of Ontario. The 1930s-era worker housing in North Town tended to be small in size, containing only one or two bedrooms, one outhouse, and sometimes a garage or additional outbuilding.³⁸ North Town was connected to Cucamonga by commercial development along Archibald Avenue and is thus treated as part of Cucamonga.



Figure 3: Citrus packing house on Santa Fe Railway, looking toward Archibald Avenue from 8th Street, c. 1920 (Donald Clucas, Light Over the Mountain: A History of the Rancho Cucamonga Area. Upland: California Family House, 1979, 77).

Etiwanda: The completion of the Santa Fe Railway through the Cucamonga Valley in 1887 created enhanced opportunities for agriculture in early Etiwanda. Although residents of Etiwanda were frustrated that the Santa Fe depot was established three-quarters of a mile east of their town, improved transportation throughout the region still offered greater ease of transporting agricultural goods via railway and the agriculture industry in Etiwanda flourished in the late 1880s. Etiwanda farmers produced a variety of crops, including grape vines, oranges, lemons, apricots, peaches, and pears.³⁹

³³ Ibid, 53.

³⁴ Max van Balgooy. "North Town: A Disregarded Community, A focus on the 1930s," Paper for Dr. Carlos Cortes, *Chicano Studies* 2, 1980. 2 Dec 1980, 1.

³⁵ Balgooy, 2-3.

³⁶ Nacho Gracia. Interview, 5 June 2001, Rancho Cucamonga Oral History Project, 2.

³⁷ Gracia, 5.

³⁸ Ibid., 3.

³⁹ Clucas, 211.

Following its initial boom in agriculture, the Etiwanda Colony grew and began to have needs of a small town. The Chaffey brothers oversaw the building of the first school in the Colony, located at the corner of Base Line and East Avenues, in 1883. A second, larger school building was erected in 1890 at the corner of Victoria and Etiwanda Avenues, replaced in 1912 by a larger red brick structure and replaced once more in 1938 with a fourth school building, a portion of which remains today.⁴⁰ The first church, initially named the Congregational Church of Etiwanda and later renamed the Etiwanda Community Church, was founded in the late 1880s or early 1890s (exact date unknown).⁴¹ Reflecting the growing prosperity of the region, the first electric light to be illuminated in Southern California was turned on at the Garcia home in Etiwanda in 1882. Soon after, the Chaffey's began to install electric lights on posts lining Euclid Avenue in neighboring Ontario, each spaced one mile apart.⁴² In the same year, the Chaffeys' installed a telephone line to San Bernardino.⁴³

Pacific Electric Railway (PE Railway): The San Bernardino Line of the PE Railway, with stations in Claremont, Upland, Alta Loma, Etiwanda, Fontana, and Rialto, was the Pacific Electric's longest line, completed through Rancho Cucamonga via stations at Alta Loma and Etiwanda in July 1914, offering competition to the older Santa Fe Railway to the south. Initially, the PE Railway was mostly used to transport citrus, although it carried a variety of freight.

Alta Loma: The loamosa Colony obtained its current name, Alta Loma, around the year 1913 when colonists determined that a new town should be built along the incoming PE Railway in order to take advantage of opportunities associated with proximity to a major rail line, which would pass through loamosa and on to neighboring Etiwanda. Captain Peter A. Demens, along with a committee of loamosa colonists, worked hard to encourage development of a rail line, declaring that the railroad should come through loamosa, as opposed to other neighboring communities, because a significant portion (over two-thirds) of citrus crops in Rancho Cucamonga were being grown in loamosa, distinguishing loamosa from Cucamonga and Etiwanda, which grew mostly grapes.⁴⁴ Once constructed, a boom in development occurred along the PE Railway in Alta Loma. Four packing houses, loamosa Foothill Building, Alta Loma Warehouse, Hillside Groves Packinghouse, and American Fruit Growers Packinghouse were quickly erected following completion of the railway.⁴⁵

The San Bernardino Line of the PE Railway used a diesel-electric locomotive in 1951, converting the original trolley activated-Direct Current system to low voltage track circuit operation, a change which transitioned the Railway from a high-speed inter-urban operation to a low-speed diesel freight line.⁴⁶ Demand for freight service on the San Bernardino Line declined after the 1950s, and in the early 1990s the portion of the right-of-way in San Bernardino County was assigned to the San Bernardino Associated Governments (SANBAG). While SANBAG has adopted policies preserving the right-of-way for future rail transit, in 2000, a master plan was developed for conversion of the right-of-way into a 21-mile multi-use trail stretching from Claremont to Rialto.⁴⁷

Theme: High Winds (1877-2009)

Strong winds blowing through the Cucamonga Valley have historically posed a threat, causing structural damage to buildings and disrupting the top soil needed intact for agricultural production. To

⁴⁰ Clucas, 212-213.

⁴¹ Ibid., 212.

⁴² Ibid., 216.

⁴³ Robert L. Hickcox. *A History of Etiwanda*. Etiwanda Historical Society, 1995, 6.

⁴⁴ Clucas, 179.

⁴⁵ Ibid., 181.

⁴⁶ *Pacific Electric Inland Empire Trail Master Plan*, Adopted Nov 2000, 5.

⁴⁷ Ibid., 6.

negotiate the force of the winds, tree windbreaks have historically been planted in high wind areas. A variety of plant species, including Eucalyptus and Sycamore tree varieties have served as windbreaks, remaining a visually prominent feature of the local landscape.

Theme: Winemaking (1858-1970)

Granted the 13,000 acre Rancho Cucamonga in 1839, Tiburcio Tapia planted a small vineyard from vine clippings likely obtained from the neighboring San Gabriel Mission, established by Franciscan priests in 1771,⁴⁸ and also formed a small-scale winery.⁴⁹ Tapia's original vineyard passed through the hands of Tapia's son-in-law, Leon V. Prudhomme,⁵⁰ before being sold to John Rains in 1858, who added greatly to the original vineyard, doubling it in size. "As a result of this effort, Cucamonga became the most important business point between San Bernardino and Los Angeles, and shortly thereafter, the wines produced here became known far and wide."⁵¹ Following Rains' death, the vineyard was taken over by Pierre and Jean Louis Sansevain, who also improved the vineyards,⁵² but the vineyards were later destroyed, falling victim to locust infestation.⁵³

Despite the loss of Tapia's original vineyard, the winemaking industry continued to develop and flourish in the Cucamonga Valley, moving from modestly sized wine making operations to larger-scale wine production facilities. Secondo Guasti's Italian Vineyard Company, established in 1883, was among the first production-oriented wine-making companies in the region, covering over 5,000 acres with wine-producing grapes by the early 1900s. By comparison, the entire Cucamonga Valley contained over 16,000 acres of wine grapes by 1919.⁵⁴



Figure 4: Garrett & Company vineyard, 1929 (Los Angeles Public Library)

In 1919, the 18th Amendment to the United States Constitution was passed, establishing nation-wide prohibition of the "sale, manufacturing, or transportation of alcoholic beverages." It lasted approximately 15 years and had a pronounced effect on the local wine-making industry in Rancho Cucamonga. While many wineries were forced to close down operations, others conceived of creative

⁴⁸ Dinkelspiel, 101.

⁴⁹ James Hofer. "A short history of grape growing in the Cucamonga Valley," *Cucamonga Valley, an area with a vibrant past – and present*, California Historian, Conference of California Historical Societies, Vol. 53, No. 4, 2007, 23.

⁵⁰ Clucas, 65.

⁵¹ Clucas, 65-68. Grapes varieties grown in Cucamonga Valley primarily produced sweet wines.

⁵² Clucas, 65.

⁵³ Clucas implies, although does not explicitly state, that the vineyards were destroyed by locust infestation prior to 1920 (Clucas, 70).

⁵⁴ Hofer, 23.

ways to keep their businesses open despite Prohibition. Some wineries continued to harvest grapes, using their facilities to produce a variety of products including table grapes, grape juice, grape and wine jellies, and beef and liver additives.⁵⁵ As taking wine with meals was an important custom for Italian immigrants in particular, home winemaking was allowed at a maximum quantity of 200 gallons per year for family use.⁵⁶ Despite the hardships placed on grape growers during prohibition, the amount of land used for vineyards continued to grow in the Cucamonga region, increasing from 16,000 acres in 1919 to 21,000 acres in 1930.⁵⁷

Prohibition was repealed in December of 1933 and many United States wineries restarted operation. During this time, the wine-making industry largely shifted from small- to large-scale production operations. In order to compete with large-scale wineries, small-scale wineries joined with one another to form cooperatives such as the Cucamonga Pioneer Vineyard Association (formed 1934), wherein association members would pool their fruit and share revenue on a percentage basis determined by the quantity of fruit contributed by each grower.⁵⁸ Improvements in the handling and transportation of wine grapes that came about upon the repeal of Prohibition also facilitated recovery and success of the winemaking industry in the Cucamonga Valley, which continued to flourish until the early 1950s.⁵⁹

The postwar alteration of Cucamonga Valley's rural landscape began in 1947 with construction of Henry J. Kaiser's large steel mill in Fontana. Then, in 1951, the City of Ontario removed a vineyard purchased 11 years earlier for expansion of its airport; the city continued to acquire more vineyards as the airport grew. Meanwhile, tastes in wine were changing, and sweet wines traditionally produced in the Cucamonga Valley were losing market share to drier varietal wines produced in Northern California. Bad weather conditions in the early 1950s led to poor harvests. Suburban sprawl sent real estate prices and property taxes soaring, and increased air pollution adversely affected agriculture. In 1950, 20 wineries were operating in the Rancho Cucamonga area. By 1970, only five remained.⁶⁰

CONTEXT: ROUTE 66 (1926-1970)

Completed across the United States in the late 1930s, United States Highway 66 (Route 66) resulted from a nation-wide effort to create a highway linking small towns and larger cities from Chicago to Los Angeles. Route 66 is located along Foothill Boulevard running east-west through Rancho Cucamonga and contains historic resources significant for their association with Route 66, such as the locally designated Richfield Oil Station, located at 9670 Foothill Boulevard, and the Magic Lamp Inn, located at 8189 Foothill Boulevard. Aided by the financial backing and large-scale organization of the Federal Aid Road Act of 1916 and the Federal Highway Act of 1921, Route 66 (also referred to as "The Mother Road") was commissioned in 1926. Nationwide prosperity following WWII afforded many people the opportunity to travel for leisure and automobile excursions west on Route 66 quickly evolved into a cultural phenomenon. It attracted a multitude of tourists anxious to see the West and visit the

⁵⁵ One particularly innovative approach to keeping wineries alive was the selling of Wine Grower's Brick, a non-alcoholic "brick" of grape juice containing a recipe for how to *not* make wine with the addition of a specific list of ingredients one *should not mix* with the "brick" (i.e., "do not add six cups of sugar, do not add this special yeast that we have provided, *do not add* this much water, because if you do you will be in violation of the Prohibition act as a manufacturer of wine"). After several years of successful Wine Grower's Brick sales, the government discovered the "brick" and outlawed sale of such items (Hofer, 23).

⁵⁶ Hofer, 23.

⁵⁷ Ibid., 23.

⁵⁸ Ibid., 24.

⁵⁹ Ibid., 23.

⁶⁰ Historical Assessment and Artifacts Inventory of the Ellena Brothers Winery / Regina Grape Products Co. (Regina Winery), Prepared for the Redevelopment Agency of the City of Rancho Cucamonga; Prepared by Chattel Construction Corporation / Mellon & Associates, Oct 1997, 11-3.

interesting roadside businesses that had sprung up alongside Route 66, appealing to the tourist market with an array of food and refreshment options, trading posts, references to Native American culture, and more obscure sources of entertainment, such as snake pits, petting zoos, and exotic carnival games.⁶¹ The popularity of Route 66 indirectly led to its demise and ultimately to its decommissioning in 1985.⁶² Experiencing heavy traffic during WWII by tourists and the trucking industry, it became crowded and fell into disrepair.⁶³ In addition, beginning in the 1950s, modern highways and interstate systems were built throughout the nation, often bypassing small towns that had grown dependent on Route 66 travelers for business. Despite the dramatic decline in traffic, some Route 66 businesses endured, developing a cult following of travelers anxious to experience the mystic Route 66 as it once was.⁶⁴

The section of Route 66 running through Rancho Cucamonga contains a small collection of scattered historic resources potentially significant for their association with Route 66. However, modern developments on Foothill Boulevard have interrupted the continuity and sense of time and place necessary for designation of a Route 66 historic district in the City, although a small cluster of historic resources, including the Magic Lamp Inn, is located in the Bear Gulch area along Foothill Boulevard in the eastern portion of the City. Other local historic resources potentially significant for their association with Route 66 tend to be scattered and include single-family homes and small commercial establishments.

CONTEXT: POSTWAR DEVELOPMENT (1945-1977)

Following World War II in 1945, Rancho Cucamonga's landscape began to shift from a rural to suburban environment, reflecting the nation-wide trend toward decentralization of the city. Driven by rapid highway construction, increasing automobile ownership, availability of modern building technologies, and the Baby Boom, the postwar period brought about an increase in housing demand and rising land values, spawning development of tract housing and light industry in Rancho Cucamonga.⁶⁵ The City became a sprawling suburb during this time, with neighborhood-scale shopping centers and office parks with surface parking proliferating throughout the City, aiming to meet the needs of citizens and nearby residents.

Historic aerial photographs of the City indicate that postwar tract housing was frequently inserted into plots of land formerly used for agriculture. Many such tracts represent the curvilinear residential suburb model that had become the nationwide standard for neighborhood design by the late 1940s.⁶⁶ Characterized by curving streets as opposed to an orthogonal grid, this model was ideally interspersed with neighborhood parks, landscaping, and trails, with a small handful of housing models repeated throughout the tract. Standardization and large-scale production of housing stock allowed many homes to be built quickly and at a low cost, meeting the postwar demand for Veteran housing and accommodations to meet the needs of the continually growing population. As lands once occupied by agricultural uses were needed to accommodate this new pattern of development, the citrus groves and vineyards that had once characterized the local landscape eventually gave way almost entirely to suburbanization.

⁶¹ Repp, Thomas Arthur. *Route 66: The Romance of the West*. Lynnwood: Mock Turtle Press, 2002, 9.

⁶² Michael Cassity. *Route 66 Corridor National Historic Context Study*, National Park Service, 2004, vi.

⁶³ *Ibid.*, 236.

⁶⁴ *Ibid.*, vi.

⁶⁵ David L. Ames and Linda Flint McClelland. *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places*. U.S. Department of the Interior, National Park Service, Sept 2002, 25.

⁶⁶ *Ibid.*, 51.

While a survey of all postwar housing in Rancho Cucamonga has yet to be performed, the City is home to several early postwar tracts, some of which retain a strong sense of time and place and as such should be considered for their historic significance as an intact grouping of postwar homes. For example, the housing tract located northwest of the historic town center of Cucamonga, bounded by Hellman Avenue to the east and San Bernardino Road to the south, centering on Selma Avenue, Harvard Street and Montara Avenue (Cucamonga Vineyard Tract Subdivision B, Tract No. 5576) appears to be a relatively intact example of postwar tract housing, with the majority of the houses in the tract organized along curvilinear streets culminating in cul-de-sacs, retaining original Swiss Chalet architectural features, street set-backs, and general sense of time and place as a collection of early postwar housing.

CONTEXT: CONSOLIDATION AND INCORPORATION (1977-2009)

Encouraged by the initial boom in land values and development, Rancho Cucamonga colonists began discussing the possibility of incorporating the three towns of Cucamonga, Alta Loma and Etiwanda as early as 1887. Despite attempts at consolidation over the years, it was not until much later that this dream was realized. The City of Rancho Cucamonga was finally incorporated in 1977, consolidating Cucamonga, Alta Loma, and Etiwanda into one municipality, reaching a milestone sought after by local residents for nearly one hundred years. Incorporation halted the uncontrolled growth that had been occurring in the area and provided numerous other benefits, including increased park and recreation opportunities, improvements to existing neighborhoods, construction of new neighborhoods, and advances in local economic development. The three historic towns became part of the larger whole, providing opportunities for growth and improvement but also absorbing the character of each town center. As a result, the City has before it the opportunity to plan for the benefit of the City at-large while also continuing to recognize the historic communities from which it came.

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Other Identifier	Street No.	Street	APN	Year Constructed	Updated Status Code (2009)	Previous Status Code
Biane Winery, formerly Padre Winery	9985	8th St	20920119 / 20920120	c. 1909; remodeled 19 2S2		PLL
Sweeten Hall	9324	San Bernardino Rd	20811109	1940	3CS	DLL
	8619	Baker Ave	20713253	1916	3CS	PLL
Mandala Winery	10277	Foothill Bl	20833123	1915 est.	3CS	PLL
Scott House	8555	Grove Ave	20722203	ca. 1930	3CS	PLL
Sanchez Home and Winery	7402	Hermosa Ave	107703105	1912	3CS	PLL
Cucamonga Rooming House	9680	San Bernardino Rd	20813109	1890's	3CS	PLL
Jones House	13232	Victoria Ave	22706171	1911	3CS	PLL
Billings	7601	Archibald Ave	107732112	1916 est.	3CS	SUS
Stone House	10270	Church St	107727103		3CS	SUS
American Foods Corp. / Padre Winery / Biane Winery	10037	8th St	20920118	1937	3CS	URM
Willows School	8968	Archibald Ave	20917115	1916	3S	PLL
nosenzo-smiderle house	8068	Archibald Ave	20815301	1930	5S1	
	6878	Etiwanda Ave	108951108	1940	5S1	
Charles E.Smith House	9385	Lomita Dr	20208234	1931	5S1	
Tolstoy House	9686	Hillside Rd		1890	5S1	DLL
Richfield Oil Station (Route 66)	9670	Foothill Bl	20815305	1915 est.	5S1	PLL
	12966	23rd St	22512216	1924	5S3	
	10147	8th St	20922105	ca. 1935	5S3	
	7147	Amethyst Ave	20215103	1915	5S3	
	7251	Amethyst Ave	20216147		5S3	
	8987	Archibald Ave	20919101	1915	5S3	
	9677	Archibald Ave			5S3	
	13284	Banyan St	22512284	1934	5S3	
Stephens House	13008	Banyan St / Summit Ave			5S3	
	8933	Belmont Ave	20919206	1925	5S3	
	6962	East Ave			5S3	
	9648	Estacia Ct	20815206		5S3	

	9664	Estacia Ct	20815214		5S3	
	6688	Etiwanda Ave			5S3	
	7050	Etiwanda Ave	108907124	1938	5S3	
	11921	Foothill (SE Corner Foothill and Rochester)			5S3	
	9468	Lomita Dr	20208115	1920	5S3	
	9516	Monte Vista St	20213105	1922	5S3	
	9603	Monte Vista St	20213143	1965	5S3	
	9346	San Bernardino Rd	20811125	1915	5S3	
	9650	San Bernardino Rd	20813112	1916	5S3	
Chinese House		San Bernardino Rd and Klusman Ave	20815124		5S3	
	10247	Wilson Ave			5S3	
Russian Village		Madrone Ave	20726257	est. 1920s	5S3	
Powelson-Beckley House	10213	19th St	20220139	1932-33 est.	5S3	PLL
Danner's Market	9747	8th St	20919109	1915 Est.	5S3	PLL
Winter-Brubaker House	8308	9th St	20738110	1913 Est.	5S3	PLL
Cask and Cleaver	8649	9th St	20726218	1945	5S3	PLL
Blake	7026	Amethyst Ave	20207111	1928	5S3	PLL
Roberts House	7209	Amethyst Ave	20216103	1918	5S3	PLL
Roberd/Dishman/Klusman	7235	Amethyst Ave	20216101	1923	5S3	PLL
Wangler	7251	Amethyst Ave	20216113	1919	5S3	PLL
Davison/Scoville House	7263	Amethyst Ave	20216112	1926	5S3	PLL
Bennett	7271	Amethyst Ave	20216111	1923	5S3	PLL
Krysto Ranch House (Krystopovich-Vai)	5917	Archibald Ave	20115215	1916 est.	5S3	PLL
Jamison House	8204	Archibald Ave	20837714	1926	5S3	PLL
La Paloma Market	8847	Archibald Ave	20906122	1915	5S3	PLL
Eckman House	8213	Arrow Rte	20734213 / 20734246	1926	5S3	PLL
	8783	Arrow Rte	20726221	1928 or 29	5S3	PLL
	7895	Calle Casino	20707211	1935	5S3	PLL
	8373	Camino Sur	20707201	1946	5S3	PLL
Millick/Frost	7082	East Ave	22712124	1936 est.	5S3	PLL
John Scott	6293	Etiwanda Ave	22520130	1932 est.	5S3	PLL
Price House	6658	Etiwanda Ave	22748123	1893	5S3	PLL
Frost	6892	Etiwanda Ave	22704110	1918 est	5S3	PLL
Frost	6898	Etiwanda Ave	22704117		5S3	PLL
Pearson	6956	Etiwanda Ave	22710108	1921 est.	5S3	PLL
Iglesia Del Nazareno (Nazarene Church)	9797	Feron Bl	20906128	1920 est.	5S3	PLL

Unknown	6958	Filkins	107625136	ca. 1910	5S3	PLL
Tapparo	9612	Foothill Bl	20815312	1935-1940 est.	5S3	PLL
Rancho Cucamonga	8725	Grove Ave	20724130	est. 1925	5S3	PLL
	6167	Hellman Ave	106239101	1915 est.	5S3	PLL
Kincaid House	5510	Hermosa Ave	107421133	1916 est.	5S3	PLL
	7609	Hermosa Ave	107728144	1895	5S3	PLL
Etiwanda Road House / Casaletti's Polka Palace	12583	Highland Ave	22741175	1926 est.	5S3	PLL
Cherbak	9926	Hillside Rd	107419101	1916 est.	5S3	PLL
W. Ledig House	9408	La Mesa Dr	20208221	1928	5S3	PLL
Krysto	9496	La Vine St	20207113	1927	5S3	PLL
Derfer House	9393	Lomita Dr	20208230	1928	5S3	PLL
Williams	9593	Monte Vista St	20213144	1927	5S3	PLL
Dahlstrom	9627	Monte Vista St	20213140	1920	5S3	PLL
Roberds Court House II	9540	Roberds Court	20216105	1922-24	5S3	PLL
Roberds Court House I	9548	Roberds Court	20216105	1922-24	5S3	PLL
Morris-Gakle House	9630	San Bernardino Rd	20813114	1913 est.	5S3	PLL
Noell House	9638	San Bernardino Rd	20813113	1913 est.	5S3	PLL
Noell-Blankenship	9658	San Bernardino Rd	20813111	pre 1913	5S3	PLL
Rahn-Whiting House	9666	San Bernardino Rd	20813110	pre 1913	5S3	PLL
Smith House	7850	Valle Vista Dr	20708131	1931	5S3	PLL
John Frost	12996	Victoria Ave	22706164	1915 est.	5S3	PLL
Fultz House	13325	Victoria Ave	22714129		5S3	PLL
Meyers	13483	Victoria Ave	22714143	1915 est.	5S3	PLL
	10295	19th St	20220135	1930s est.	5S3	SUS
Lady of Mt Carmel Church	10079	8th St	20920104	1916 Est.	5S3	SUS
	8151	9th St	20724115	1937	5S3	SUS
	8607	9th St	20727119	1905 est.	5S3	SUS
	8725	9th St	20727128	1925	5S3	SUS
warehouse for cannery	8847	9th St	20727149	1940	5S3	SUS
	7862	Alta Cuesta Dr	20707208	1952	5S3	SUS
	6865	Amethyst Ave	20212102	1938	5S3	SUS
Clayton	6931	Amethyst Ave	20213174	1925 est.	5S3	SUS
	7084	Amethyst Ave	20207252	1937 est.	5S3	SUS
	5651	Archibald Ave	20183102		5S3	SUS
	7613	Archibald Ave	107732111	1916 est.	5S3	SUS
Rehm	7639	Archibald Ave	107732109	1916 est.	5S3	SUS
Forster	7671	Archibald Ave	107732106	1916 est.	5S3	SUS
	8186	Arrow Rte	20717128	1936	5S3	SUS
Ynostroza House	8734	Calaveras Ave	20724116	1936 est.	5S3	SUS
	7839	Calle Casino	20707112	1948	5S3	SUS

Topliff	8442	Camino Sur	20706118	1932 est.	5S3	SUS
	8456	Camino Sur	20706207		5S3	SUS
	8925	Center Ave	20924107	1930	5S3	SUS
Etiwanda Dairy	6261	East Ave	22519128	1888 est.	5S3	SUS
George Klusman	9605	Estacia Ct	20815314	1926 est.	5S3	SUS
George Klusman	9611	Estacia Ct	20815315	192526	5S3	SUS
	9619	Estacia Ct	20815316	1927 est.	5S3	SUS
	9627	Estacia Ct	20815317		5S3	SUS
Foothill Liquor (John & Lucia Nosenzo)	8161	Foothill Bl	20711311	1945 est.	5S3	SUS
	8681	Grove Ave	20723101	1925	5S3	SUS
Wally Grass House	5968	Hellman Ave	106222103	1931 est.	5S3	SUS
Harry Ledig House	6048	Hellman Ave	106227101	1932 est.	5S3	SUS
Vaughn House	7508	Hellman Ave	20816228	1924 est.	5S3	SUS
	8001	Hellman Ave	20814141	1940	5S3	SUS
	9317	La Grande St	20208129	1948	5S3	SUS
Dixon House	9436	La Grande St	20207233	1928	5S3	SUS
	9309	Lomita Dr	20208201	1929	5S3	SUS
	9359	Lomita Dr	20208231	1935 est.	5S3	SUS
	9367	Lomita Dr	20208205	1928 est.	5S3	SUS
	9409	Lomita Dr	20208210	1927 est.	5S3	SUS
	9398	San Bernardino Rd	20811118	1927 est.	5S3	SUS
Brand House	9498	San Bernardino Rd	20852301	1916 est.	5S3	SUS
	8764	Sierra Madre Ave	20724317	1948	5S3	SUS
	7894	Valle Vista Dr	20708122	1942	5S3	SUS
Castellini	7897	Valle Vista Dr	20708214	1935 est.	5S3	SUS
	8405	Vineyard Ave	20825112		5S3	SUS
	8810	Vineyard Ave	20727123	est. 1930	5S3	SUS
	6765	Etiwanda Ave	22706114	1949	6DQ	
	6770	Etiwanda Ave	108950102	1935	6DQ	
	6862	Etiwanda Ave	108951107	1940	6DQ	
	9316	La Grande St	20207201	1955	6DQ	
	9390	La Grande St	20207251	1946	6DQ	
	9452	La Grande St	20207231	1961	6DQ	
Owen Electric	8889	Archibald Ave			6DQ	
McCandless	7090	Amethyst Ave	20207226	1928	6DQ	PLL
Stoebe House	7112	Amethyst Ave	20208143	1917	6DQ	PLL
Voth	7250	Amethyst Ave	20209107	1926	6DQ	PLL
Eckenrode	7266	Amethyst Ave	20209203	1926	6DQ	PLL
Allen	7276	Amethyst Ave	20209204	1925	6DQ	PLL

Spense House	7009	Etiwanda Ave	22712148	1923 est.	6DQ	PLL
Page House	9328	La Grande St	20207246	1966 est	6DQ	PLL
Rupp/Dixon House	9404	La Grande St	20207237	1928	6DQ	PLL
Lawyer	9420	La Grande St	20207235	1928	6DQ	PLL
McKee	9416	La Mesa Dr	20208220	1927	6DQ	PLL
	9438	La Mesa Dr	20208215	1936	6DQ	PLL
	9448	La Mesa Dr	20208214	1929	6DQ	PLL
Perdew	9358	La Vine St	20207102	1931	6DQ	PLL
Bradshaw House	9403	La Vine St	20207212	1928	6DQ	PLL
Casterline/Aeschlimann House	9413	La Vine St	20207213	1928	6DQ	PLL
Hamms House	9421	La Vine St	20207214	1928	6DQ	PLL
Wylie House	9437	La Vine St	20207216	1928	6DQ	PLL
Bauer House	9445	La Vine St	20207217	1928	6DQ	PLL
Galbraith	9356	Lomita Dr	20208124	1928	6DQ	PLL
Perdew	9548	Monte Vista St	20213109	1925	6DQ	PLL
Rabbitry	9571	Monte Vista St	20213147	1934	6DQ	PLL
Cherymisin	9579	Monte Vista St	20213146	1926	6DQ	PLL
Helmer/School	9658	Monte Vista St	20213120	1915	6DQ	PLL
Bradford	9665	Monte Vista St	20213135	1924	6DQ	PLL
	9739	8th St	20919108	1921	6DQ	SUS
	6897	Amethyst Ave	20212101	1930	6DQ	SUS
	6989	Amethyst Ave	20213155	1933 est.	6DQ	SUS
Clayton Service Station	7126	Amethyst Ave	20208118	1934	6DQ	SUS
Wentworth	9645	Estacia Ct	20815319	1929 est.	6DQ	SUS
	9657	Estacia Ct	20815321	1912	6DQ	SUS
	9350	La Grande St	20207244	1949	6DQ	SUS
	9387	La Grande St	20208108	1940	6DQ	SUS
	9412	La Grande St	20207236	1929 est.	6DQ	SUS
Schmutz	9428	La Grande St	20207234	1928	6DQ	SUS
	9470	La Grande St	20207229	1941 est.	6DQ	SUS
	9403	La Mesa Dr	20209133	1944	6DQ	SUS
	9421	La Mesa Dr	20209136	ca. 1928	6DQ	SUS
	9339	La Vine St	20207205	1948	6DQ	SUS
	9347	La Vine St	20207206	1930	6DQ	SUS
Schmutz	9378	La Vine St	20207103	1940	6DQ	SUS
	9392	La Vine St	20207105	1937 est.	6DQ	SUS
Wilson House	9429	La Vine St	20207215	1929 est.	6DQ	SUS
	9461	La Vine St	20207219	1928	6DQ	SUS
Clayton	9469	La Vine St	20207220	1928	6DQ	SUS

	9311	La Vine St (7033 Hellman)	20207203 / 20207122	1934	6DQ	SUS
	9343	Lomita Dr	20208227		6DQ	SUS
George Klusman	9350	Lomita Dr	20208125	1927 est.	6DQ	SUS
	9392	Lomita Dr	20218239	1928 est.	6DQ	SUS
	9423	Lomita Dr	20208212	1929 est.	6DQ	SUS
	9477	Lomita Dr	20208316	1926	6DQ	SUS
	9489	Lomita Dr	20208304	1926	6DQ	SUS
Patterson	9516	Monte Vista St	20213105	1916	6DQ	SUS
Ramsell	9539	Monte Vista St	20213151	1928	6DQ	SUS
Ramsell	9547	Monte Vista St	20213150	1916	6DQ	SUS
	9563	Monte Vista St	20213148	1924	6DQ	SUS
Ewan	9564	Monte Vista St	20213170	1924	6DQ	SUS
Ward	9587	Monte Vista St	20213145	1918	6DQ	SUS
	9602	Monte Vista St	20213113	1946	6DQ	SUS
	9610	Monte Vista St	20213114	1945	6DQ	SUS
Colins	9611	Monte Vista St	20213142	1924	6DQ	SUS
Carrari	9626	Monte Vista St	20213116	1916	6DQ	SUS
Sarzotti	9633	Monte Vista St	20213139	1936	6DQ	SUS
	9634	Monte Vista St	20213117	1928	6DQ	SUS
Carranza	9641	Monte Vista St	20213138	1921	6DQ	SUS
Gallo	9659	Monte Vista St	20213136	1921	6DQ	SUS
Ulmer/Burlack	9674	Monte Vista St	20213122	1935	6DQ	SUS
Burlack	9680	Monte Vista St	20213123	1919 est.	6DQ	SUS
	9681	Monte Vista St	20213133	1926	6DQ	SUS
	9687	Monte Vista St	20213132	1925	6DQ	SUS
	9688	Monte Vista St	20213124	1921	6DQ	SUS
Laborde	9699	Monte Vista St	20213131	1916	6DQ	SUS
	9323	San Bernardino Rd	20814141	est. 1930s	6DQ	SUS
	9389	San Bernardino Rd	20814130	1936	6Q	
	9332	19th St	20147409	1930 est.	6Q	SUS
	12922	23rd St	22512219	1965	6Z	
	12946	23rd St	22512217	1950	6Z	
E. Clark	12983	23rd St	22512225	1897 est.	6Z	
	10125	8th St			6Z	
	10141	8th St	20922105	1920	6Z	
	10153	8th St	20922106	1935	6Z	
	8531	8th St	20727109		6Z	

	8553	8th St	20727110		6Z
	8581	8th St	20727117		6Z
	8593	8th St	20727118		6Z
Stevie Dee's Cafe and Bertino	8880	8th St	20727133	1961	6Z
Auto Service					
	8395	9th St	20753172	1936	6Z
	8427	9th St	20753128	1953	6Z
	8431	9th St	20753129	1956	6Z
	8521	9th St	20727108	1952	6Z
Nick's House	8810	9th St	20726235		6Z
	6953	Amethyst Ave	20213103	1922	6Z
	8036	Archibald Ave	20815217	1960	6Z
	8042	Archibald Ave	20815216	1960	6Z
	8070	Archibald Ave	20815302	1961	6Z
	8943	Archibald Ave			6Z
	8959	Archibald Ave	20919104	1945	6Z
	8971	Archibald Ave	20919103	1930	6Z
	8981	Archibald Ave	20919102	1940	6Z
	8410	Arrow Rte	20759135	1952	6Z
	8420	Arrow Rte	20759134	1955	6Z
	8432	Arrow Rte	20759133	1952	6Z
	8488	Arrow Rte	20759129	1954	6Z
	8556	Arrow Rte	20720103	1946	6Z
	8588	Arrow Rte	20720106	1949	6Z
	8598	Arrow Rte	20720107	1949	6Z
	8643	Arrow Rte	20726238	1946	6Z
	8653	Arrow Rte	20726239	1959	6Z
	8466	Baker Ave	20759127	1957	6Z
	8529	Baker Ave	20762191	1952	6Z
	8719	Baker Ave	20727107	1954	6Z
	8723	Baker Ave	20727106	1952	6Z
	8735	Baker Ave	20727105	1952	6Z
	8743	Baker Ave	20727104		6Z
	8817	Baker Ave	20727139	1954	6Z
	8930	Belmont Ave	20919110	1920	6Z
	8938	Belmont Ave	20919111	1930	6Z
	8944	Belmont Ave	20919112	1925	6Z
	8949	Belmont Ave	20919204	1925	6Z
	9007	Center Ave	20925106	1926	6Z
	9651	Estacia Ct	20815320	1914	6Z
	5913	Etiwanda Ave	22512220	1936	6Z

5939	Etiwanda Ave	22512222	1961	6Z
5992	Etiwanda Ave	22511136	1960	6Z
6655	Etiwanda Ave	22705110	1955	6Z
6771	Etiwanda Ave	22706131	1954	6Z
6781	Etiwanda Ave	22706136	1953	6Z
6795	Etiwanda Ave	22706101	1946	6Z
6893	Etiwanda Ave	22706113	1953	6Z
9300	Foothill Bl	20814128	1945	6Z
9328	Foothill Bl	20814142	1937	6Z
9336	Foothill Bl	20814125	1959	6Z
9356	Foothill Bl	20814122	1948	6Z
9366	Foothill Bl	20814121	1948	6Z
9388	Foothill Bl	20814119	1930	6Z
8591	Grove Ave	20722227	est. 1920	6Z
5454	Hellman Ave	106138104	1962	6Z
7087	Hellman Ave	20207253	1954	6Z
7091	Hellman Ave	20207254	1953	6Z
9280	Hillside Rd	106138107	1964	6Z
9292	Hillside Rd	106138106	1957	6Z
9321	La Grande St	20208130	1953	6Z
9349	La Grande St	20208104	1948	6Z
9355	La Grande St	20208105	1949	6Z
9367	La Grande St	20208106	1949	6Z
9374	La Grande St	20207241	1946	6Z
9377	La Grande St	20208107	1950	6Z
9382	La Grande St	20207240	1923	6Z
9396	La Grande St	20207247	1953	6Z
9415	La Grande St	20208111	1950	6Z
9431	La Grande St	20208137	1956	6Z
9446	La Grande St	20207232	1925	6Z
9475	La Grande St	20208116	1960	6Z
9309	La Mesa Dr	20209126	1950	6Z
9339	La Mesa Dr	20209132	1963	6Z
9376	La Mesa Dr	20208223	1960	6Z
9318	Lomita Dr	20208128	1948	6Z
9323	Lomita Dr	20208235	1951	6Z
9328	Lomita Dr	20208127	1950	6Z
9338	Lomita Dr	20208126	1928	6Z
9375	Lomita Dr	20208206	1950	6Z
9382	Lomita Dr	20208123	1951	6Z
9397	Lomita Dr	20208209	1921	6Z

	9410	Lomita Dr	20208148	1948	6Z	
	9417	Lomita Dr	20208211	1949	6Z	
	9420	Lomita Dr	20208141	1956	6Z	
	9441	Lomita Dr	20208213	1934	6Z	
	9453	Lomita Dr	20208315	1954	6Z	
	8535	Madrone Ave	20726204	1946	6Z	
	9511	Monte Vista St	20213167	1948	6Z	
	9522	Monte Vista St	20213106	1955	6Z	
	9529	Monte Vista St	20213168	1957	6Z	
	9531	Monte Vista St	20213169	1954	6Z	
	9532	Monte Vista St	20213107	1965	6Z	
	9540	Monte Vista St	20213108	1962	6Z	
	9555	Monte Vista St	20213149	1953	6Z	
	9582	Monte Vista St	20213158	1959	6Z	
	9584	Monte Vista St	20213159	1943	6Z	
	9617	Monte Vista St	20213141	1912	6Z	
	9618	Monte Vista St	20213115	1951	6Z	
	9651	Monte Vista St	20213137	1959	6Z	
	9656	Monte Vista St	20213121	1962	6Z	
	9698	Monte Vista St	20213125	1927	6Z	
	9547	San Bernardino Rd	20815107	1948	6Z	
	9670	San Bernardino Rd	20813110	1920	6Z	
	13066	Summit Ave	22512237	1962	6Z	
	13100	Summit Ave	22512279	1960	6Z	
	6051	Summit Ave	22512287	1963	6Z	
	6060	Summit Ave	22512235	1964	6Z	
	6061	Summit Ave	22512251	1964	6Z	
	6071	Summit Ave	22512280	1937	6Z	
	6081	Summit Ave	22512278	1960	6Z	
	12930	Victoria Ave	22706124	1956	6Z	
	12952	Victoria Ave	22706122	1956	6Z	
	8368	Arrow Rte			6Z	6Z
	8380	Arrow Rte			6Z	6Z
	8462	Edwin St	20718135	1958	6Z	6Z
	10223	19th St	20220140	est. 1950	6Z	PLL
Billings Store	7145	Amethyst Ave	20215113	1921	6Z	PLL
Gas Station	12906	Baseline Rd	22713117	1915 est.	6Z	PLL
	7327	Beryl Ave	20801116		6Z	PLL
	7411	Beryl Ave	20892101		6Z	PLL
	7873	Buena Vista Dr	20707212	1946	6Z	PLL
Market	8807	Center Ave	20912201	1920	6Z	PLL

Jones	6990	East Ave	22712136		6Z	PLL
Harvey	9665	Estacia Ct	20815322	1917 est.	6Z	PLL
Perdew	5913	Etiwanda Ave	22512220	1916 est.	6Z	PLL
Perdew	5927	Etiwanda Ave	22512221	1895 est.	6Z	PLL
Fred Henderson	5938	Etiwanda Ave	22511112	1921 est	6Z	PLL
Raymond Henderson	5959	Etiwanda Ave	22512259	1934 est	6Z	PLL
Walter Henderson	5995	Etiwanda Ave	22512228	1955	6Z	PLL
Grover Henderson	6084	Etiwanda Ave	22511105	1932 est	6Z	PLL
Huber-Harne	7066	Etiwanda Ave	22710109	1958 est.	6Z	PLL
Johanning/Johnston	7256	Etiwanda Ave	22711110	1900 est.	6Z	PLL
Ingvaldsen Home	8062	Etiwanda Ave	22722114	Approx. 1915	6Z	PLL
Kemp	13151	Highland Ave	22705106	1932 est.	6Z	PLL
Wagner	7124	Ramona	20218118	1915 est.	6Z	PLL
Milliken House	8733	Sierra Madre Ave	20724407	1932 est.	6Z	PLL
	8745	Sierra Madre Ave	20724406	1940 Est.	6Z	PLL
Allen	13132	Victoria Ave	22706176	1915 est.	6Z	PLL
Donnelly	13537	Victoria Ave	22714144	1923 est.	6Z	PLL
	7745	Vineyard Ave	20809144		6Z	PLL
	7767	Vineyard Ave	20809120		6Z	PLL
	7777	Vineyard Ave	20809119		6Z	PLL
	7785	Vineyard Ave	20809123		6Z	PLL
George Klusman House	9113	Foothill Bl	20824109	1911 est.	6Z	PLL/DEM
Thomas House	7980	Vineyard Ave	20710209	1926	6Z	PLL/DEM
Goerlitz House (Herbert & Evelyn)	9893	Highland Ave	107605102	1926	6Z	PNR (DLL)
Auto Service		9th and Vineyard SW corner	20727152		6Z	SDI
Possible Richfield Service Station	8291	Foothill Bl	20711324	Unknown	6Z	Survey Needed
	9725	8th St	20919116	1952	6Z	SUS
Stipe	9797	8th St	20919212	1916 Est.	6Z	SUS
Morales House	8193	9th St	20724211	1928 Est.	6Z	SUS
	7838	Alta Cuesta Dr	20707206	1935	6Z	SUS
	6714	Amethyst Ave	20206115	1924 est.	6Z	SUS
Perdew-Van Fleet	6097	Archibald Ave	20125125	1935 est.	6Z	SUS
Beakman House	7627	Archibald Ave	107732110	1916 est.	6Z	SUS
Carman	7649	Archibald Ave	107732108	1916 est.	6Z	SUS
Mathis	7663	Archibald Ave	107732107	1916 est.	6Z	SUS
	8430	Archibald Ave	20881160	1916 est.	6Z	SUS
	8307	Arrow Rte	20722208	1917 est.	6Z	SUS
Grass House	9006	Arrow Rte	20825109	1923 est.	6Z	SUS

	9655	Banyan St	106240106		6Z	SUS
Malpasuto	12659	Baseline Rd	22717119	1938 est.	6Z	SUS
	12951	Baseline Rd	22718120	1915 est.	6Z	SUS
	8370	Camino Sur	20705315	1938	6Z	SUS
	7412	Carnelian St	20749102	1920's est.	6Z	SUS
	8933	Center Ave	20924106	1920	6Z	SUS
H.W. Minor	9635	Estacia Ct	20815318	1917 est.	6Z	SUS
	9656	Estacia Ct	20815323		6Z	SUS
Gardner	7257	Etiwanda Ave	22713119	1917 est.	6Z	SUS
	12854	Foothill Bl	22722126		6Z	SUS
	8581	Grove Ave	20722201	1954	6Z	SUS
	6422	Haven Ave	20126230	1924 est.	6Z	SUS
McDonald House	7091	Hellman Ave	20816228	1944 est.	6Z	SUS
	9022	Hellman Ave	20915129		6Z	SUS
	9024	Hellman Ave	20915130		6Z	SUS
	9212	Hermosa Ave	20921141	1916 est.	6Z	SUS
	12710	Highland Ave	22517118	1923 est.	6Z	SUS
Tibbets	13719	Highland Ave	22801118	1937 est.	6Z	SUS
Perdew	9757	Liberty	20125156	1919 est.	6Z	SUS
Dishman	9333	Lomita Dr	20208228	1937 est.	6Z	SUS
Dishman	9353	Lomita Dr	20208226	1937 est.	6Z	SUS
Wilson House	9430	Lomita Dr	20208140	1928 est.	6Z	SUS
	8551	Madrone Ave	20726203	1946	6Z	SUS
	13104	Miller Ave	22718123	est. 1965	6Z	SUS
	9642	Monte Vista St	20213160	1943	6Z	SUS
	7074	Ramona	20218109	1915 est.	6Z	SUS
	8171	Rochester	22902131		6Z	SUS
	8754	Sierra Madre Ave	20724316	1950	6Z	SUS
	7859	Valle Vista Dr	20708142		6Z	SUS
	8275	Via Carillo	20716131		6Z	SUS
	7797	Vineyard Ave	20809124		6Z	SUS
	8010	Vineyard Ave	20710205		6Z	SUS
	8742	Vinmar Ave	20724215	1934	6Z	SUS
HH Thomas & Milliken	10385	Foothill Bl	20833124-26	1912	6Z	SUS
	13005	23rd St	22512233	1930	7R	
	13149	23rd St	22512242	1904	7R	
	8705	8th St	20727114		7R	
	5647	Archibald Ave			7R	
	6956	East Ave			7R	
Perdew/Fetrow/Orr	5949	Etiwanda Ave	22512233	1930	7R	PLL

Billings House	7137	Hellman Ave	20839301	1928	7R	PLL
	7802	Hermosa Ave	0		7R	PLL
Allen	13106	Victoria Ave	22706169	1899 est.	7R	PLL
Lucas Ranch House	9524	Archibald Ave	21006210	1910	7R	PLL/PNR
see 9893 Highland	6558	Hermosa Ave	107605102&3		7R	PNR (DLL)
	7404	Archibald Ave	20803117	1916 est.	7R	SUS
Beattie	7602	Archibald Ave	20804110	1916 est.	7R	SUS
Allen Hickcox	13108	Banyan Ave	22512239	1921 est.	7R	SUS
	7431	Beryl Ave	20892102		7R	SUS
Earl & Stella Ledig House	7984	Hellman Ave	20839301	1927 est.	7R	SUS
	7751	Valle Vista Dr	20706217	1935	7R	SUS

Appendix F

Hazardous Materials Analysis

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**SPECIAL STUDIES – HAZARDOUS MATERIALS ANALYSIS
GENERAL PLAN UPDATE
RANCHO CUCAMONGA, CALIFORNIA**

Prepared for

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March 26, 2009

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CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Location and Setting	2
2.0 HAZARDOUS MATERIALS	3
2.1 Hazardous Waste Definition and Characteristics	3
3.0 REGULATORY FRAMEWORK	6
3.1 Federal Regulations	6
3.1.1 National Environmental Policy Act	6
3.1.2 Clean Water Act	6
3.1.3 Safe Drinking Water Act	7
3.1.4 Hazardous Materials Transportation Act	7
3.1.5 Resource Conservation and Recovery Act	7
3.1.6 Toxic Substances Control Act	8
3.1.7 Comprehensive Environmental Response, Compensation and Liability Act	9
3.1.8 Superfund Amendments and Reauthorization Act	10
3.1.9 Emergency Planning and Community Right-To-Know Act	10
3.2 State Regulations	11
3.2.1 Porter-Cologne Water Quality Control Act	11
3.2.2 California Environmental Quality Act	11
3.2.3 California Hazardous Waste Control Act	11
3.2.4 Carpenter-Presley-Tanner Hazardous Waste Substances Account Act	12
3.2.5 Safe Drinking Water and Toxic Enforcement Act	12
3.2.6 Certified Unified Program Agency	12
3.2.7 California Accidental Release Prevention Program	13
3.3 Federal Agencies	13
3.3.1 Environmental Protection Agency	13
3.4 State Agencies	14

DRAFT

CONTENTS (Continued)

	<u>Page</u>
3.4.1 California Environmental Protection Agency	14
3.4.2 Department of Toxic Substance Control	14
3.4.3 State Water Resources Control Board and Regional Water Quality Control Board	15
3.4.4 Office of Environmental Health Hazard Assessment	15
3.5 Local Agencies	16
3.5.1 County of San Bernardino Environmental Health Services	16
3.5.2 San Bernardino County Fire Department, Hazardous Materials Division	17
3.5.3 Rancho Cucamonga Fire Protection District	18
3.5.4 Rancho Cucamonga Household Hazardous Waste Facility	19
4.0 REGULATORY REVIEW	20
4.1 Regulatory Agency Databases	20
4.2 Summary of Applicable Database Facilities	24
5.0 CONCLUSIONS	36
6.0 LIMITATIONS	39
7.0 REFERENCES	40

FIGURES

- Figure 1 Vicinity Map
Figure 2 EDR Atlas Map

TABLES

- Table 1 Comprehensive Environmental Response, Compensation and Liability
Information System – No Further Remedial Action Planned

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CONTENTS (continued)

Table 2	Corrective Action Report
Table 3	Resource Conservation and Recovery Act Information – Transport, Store, and Disposal Facility
Table 4	Resource Conservation and Recovery Act Information – Large Quantity Generator
Table 5	Resource Conservation and Recovery Act Information – Small Quantity Generator
Table 6	Resource Conservation and Recovery Act Information – Conditionally Exempt Small Quantity Generator
Table 7	Resource Conservation and Recovery Act Information – Non Generator
Table 8	Emergency Response Notification System
Table 9	Hazardous Materials Information Reporting System
Table 10	Clandestine Drug Labs
Table 11	Toxic Chemical Release Inventory System
Table 12	Toxic Substances Control Act
Table 13	Federal Insecticide, Fungicide and Rodenticide Act / Toxic Substances Control Act Tracking System
Table 14	Federal Insecticide, Fungicide and Rodenticide Act / Toxic Substances Control Act Tracking System Administrative
Table 15	Integrated Compliance Information System
Table 16	PCB Activity Database
Table 17	Material Licensing Tracking System
Table 18	Facility Index System/Facility Registry System
Table 19	Cal-Sites Database
Table 20	School Property Evaluation Program
Table 21	Solid Waste Facilities/Landfill Sites
Table 22	California Water Resources Control Board-Waste Discharge System
Table 23	Waste Management Unit Database System
Table 24	Hazardous Waste and Substances Sites List
Table 25	Recycler Database
Table 26	Leaking Underground Storage Tank Incident Reports
Table 27	Facility Inventory Database
Table 28	Statewide Spills, Leaks, Investigation and Cleanup Cost Recovery Cases

DRAFT

CONTENTS (continued)

Table 29	Active Underground Storage Tank Database
Table 30	Historical Underground Storage Tank Registered Database
Table 31	Above Ground Storage Tank Facilities Database
Table 32	Statewide Environmental Evaluation and Planning System
Table 33	California Hazardous Material Incident Report System
Table 34	Proposition 65 Reports
Table 35	Voluntary Cleanup Program
Table 36	Cleaner Facilities
Table 37	Well Investigation Program Case List
Table 38	Clandestine Drug Labs
Table 39	State Response Sites
Table 40	Facility and Manifest Data
Table 41	Aerometric Information Retrieval System
Table 42	Registered Waste Tire Haulers
Table 43	EnviroStor Database

APPENDICES

Appendix A: EDR DataMap, Environmental Atlas

DRAFT

1.0 INTRODUCTION

Hogle-Ireland, Inc. (Hogle-Ireland) was retained by the City of Rancho Cucamonga (City) to assist them in updating the existing General Plan which was adopted in 2001. The City's Policy is to keep the General Plan current and usable for making informed decisions about the development and programs for its citizens. Hogle-Ireland retained Laguna Geosciences, Inc. (LGI) to update the existing Hazardous Materials Analysis Special Study (Special Study) to incorporate into applicable sections of the General Plan.

The objectives of LGI's Special Study were to:

- Define hazardous waste and the types of hazardous waste;
- Provide a regulatory framework with a brief description of applicable federal, state, and local regulations and regulatory agencies;
- Review the environmentally impacted Sites listed in the federal, state, tribal and local regulatory database search provided by Environmental Data Resources, Inc. (EDR); and
- Prepare a list of facilities which have a high potential or known release of hazardous substances into the ground, groundwater or surface waters of the Site and which are or would be the subject of enforcement action by an appropriate regulatory agency.

The chemicals that are used every day to improve our quality of life are widespread throughout homes, government facilities, service companies, and manufacturing and industry facilities. These chemicals do not represent a problem as long as they are properly transported, stored, used and disposed. However, once these chemicals have leaked, spilled, released, and/or are illegally disposed they become potentially hazardous waste and can be a threat to human health and the environment.

The greatest quantities of commonly used chemicals in the City are most likely used and/or stored by the residents. A typical home generally contains small quantities of: medications; gasoline; antifreeze; new and used motor oil; lubricants and grease; auto batteries; pesticides; herbicides; fertilizers; drain cleaners; cleaning products; solvents; adhesives; and paint and paint products.

A number of service industries such as dry cleaners, gasoline service stations, and vehicle maintenance facilities, which use and store chemicals are located throughout the residential and

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industrial portion of the City. These Sites use a variety of chemicals including: halogenated solvents; oil and grease; and gasoline and diesel fuel.

The majority of the manufacturing and industrial facilities are located in the southern and southeastern portion of the City. Many of these facilities appear to be associated with steel, wire, and metal manufacturing. The industrial chemicals used at these facilities include, at a minimum: metals; acids and bases; hydrocarbons and fuels, oil and greases, metal degreasers and solvents; and a variety of other compounds.

1.1 Location and Setting

The City of Rancho Cucamonga is located in the southwest corner of San Bernardino County (Figure 1). The City is bounded by the San Bernardino National Forest to the north, City of Fontana to the northeast, unincorporated land to the southeast, City of Ontario to the south and City of Upland to the west. The City is approximately 50 square miles, including the 10 square miles in the City Sphere of Influence to the north.

DRAFT

2.0 HAZARDOUS MATERIALS

Hazardous materials were first produced in the United States during the industrial revolution of the 1800's. Chemical production, and thus hazardous waste, increased significantly in the United States after World War II, when our manufacturing economy expanded significantly.

In the 1960's, it was becoming evident that exposure to chemicals and hazardous waste were having an adverse impact on human health and the environment. Media accounts of contamination at Love Canal in New York, Times Beach in Missouri, and Valley of the Drums in Kentucky, brought national attention to the problems associated with hazardous waste and hazardous waste management. Beginning in the 1970's, governments at the local, state and federal levels began to confront these problems.

2.1 Hazardous Waste Definition and Characteristics

Hazardous waste is defined as a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (EPA, 2006):

- Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

A Resource Conservation and Recovery Act (RCRA) hazardous waste is a waste that either appears on one of four hazardous waste lists (listed waste) or exhibits at least one of four waste characteristics (characteristic waste) as described below.

DRAFT

Listed Hazardous Waste

The EPA has applied the listing criteria to hundreds of industrial wastestreams. These wastes are grouped into four categories and are discussed below (EPA, 2006):

- **The F List** – This includes waste from common industrial and manufacturing processes and they are known as nonspecific sources. Wastes in this category include: spent solvent wastes, electroplating and other metal finishing wastes, dioxin-bearing wastes, chlorinated aliphatic hydrocarbon production wastes, wood preserving wastes, petroleum refinery wastewater treatment sludges; and multisource leachate.
- **The K List** – This list includes waste from specific sectors of industry or manufacturing. The 13 industries that generate K listed waste include: wood preservation; organic chemicals manufacturing; pesticides manufacturing; petroleum refining; veterinary pharmaceuticals manufacturing; inorganic pigment manufacturing; inorganic chemicals manufacturing; explosives manufacturing; iron and steel production; primary aluminum production; secondary lead processing; ink formulation; and coking.
- **The P List and the U List** – These two lists include pure or commercial grade formulations of specific unused chemicals. Chemicals on the P List are acutely toxic. The U List is generally comprised of chemicals that are toxic, but also includes chemicals that display other characteristics, such as ignitability or reactivity.

Characteristic Hazardous Waste

Characteristic waste exhibits properties which indicate they pose enough of a threat to warrant regulation as hazardous waste. The EPA's established four hazardous waste characteristics which include: ignitability; corrosivity; reactivity; and toxicity. These are discussed below (EPA, 2006):

- **Ignitability** – These wastes can readily catch fire and sustain combustion. Liquids with a flash point of less than 60 degrees C (140 degrees F) in closed-cup tests are ignitable. A nonliquid waste is considered ignitable only if it can spontaneously catch fire or catch fire through friction or absorption of moisture under normal handling conditions and can burn so vigorously that it creates a hazard. Certain compressed gases are also classified as

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ignitable. In addition, substances meeting the DOT definition of oxidizer are classified as ignitable.

- **Corrosivity** – These wastes are defined as either acidic or alkaline. Aqueous waste with a pH greater than 12.5 or less than 2 are corrosive. A liquid waste may also be corrosive if it has the ability to corrode steel under specific conditions.
- **Reactivity** – These wastes readily explode or undergo violent reactions or react to release toxic gases or fumes. A waste is reactive if it meets any of the following criteria: it can explode or violently react when exposed to water under normal handling conditions; it can create toxic fumes or gases at hazardous levels when exposed to water under normal handling conditions; it can explode if heated under confinement or exposed to a strong igniting source; or it generates toxic levels of sulfide or cyanide gas when exposed to a pH range of 2 through 12.5.
- **Toxicity** – Toxic wastes are harmful or fatal when ingested or absorbed. The EPA developed the toxicity characteristic to identify wastes likely to leach dangerous concentrations of toxic chemicals into groundwater. The testing results are compared to a list of 40 toxic chemicals to evaluate which elements will threaten human health and the environment by contaminating drinking water.

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3.0 REGULATORY FRAMEWORK

The following section provides a brief summary of some of the major federal, state and local regulations and agencies that address hazardous waste transportation, storage, generation, use, treatment, disposal and management in Rancho Cucamonga.

The applicable regulatory agencies are described below to better understand the framework for the remainder of this Special Study. Section 4.0, Regulatory Review, is based on regulatory agency databases that list environmentally impacted sites reported from these various agencies.

3.1 Federal Regulations

3.1.1 National Environmental Policy Act (42 U.S.C. §4321)

The National Environmental Policy Act (NEPA) was signed into law on January 1, 1970. NEPA establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment and it provided a process for implementing these goals within the federal agencies. The Act also established the Council on Environmental Quality (EPA, 2007), now known as the Environmental Protection Agency (EPA).

3.1.2 Clean Water Act

The Clean Water Act (CWA) was originally enacted in 1948 and was known as the Federal Water Pollution Control Act. It was revised in 1972 and again in 1987. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of the wetlands. The CWA created the National Pollution Discharge Elimination System.

Pollutants regulated under the CWA include "priority" pollutants, including various toxic pollutants; "conventional" pollutants, such as biochemical oxygen demand, total suspended solids, fecal coliform, oil and grease, and pH; and "non-conventional" pollutants, including any pollutant not identified as either conventional or priority. The CWA regulates both direct and indirect discharges (EPA, 2008).

DRAFT

3.1.3 Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation’s public drinking water supply. The SDWA authorizes the EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water.

Originally, the SDWA focused on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhance the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water (EPA, 2008a).

3.1.4 Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act was published in 1975. Its primary objective is to provide adequate protection against risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation, is, any “particular quantity of form” of a material that “may pose an unreasonable risk to health and safety of property” (EPA, 2008b).

3.1.5 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was authorized by Congress on October 21, 1976. It is the law that creates the framework for the proper management of hazardous and nonhazardous solid waste. RCRA amended the Solid Waste Disposal Act of 1965 and set the following goals (EPA, 2007a):

- Protecting human health and the environment from the potential hazards of waste disposal;
- Conserving energy and natural resources;
- Reducing the amount of waste generated; and
- Ensuring that wastes are managed in an environmentally sound manner.

To achieve these goals, RCRA established the following programs:

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- The Solid Waste Program encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal soils waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- The Hazardous Waste Program establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal, in effect from “cradle to grave”; and
- The Underground Storage Tank Program regulates underground storage tanks containing hazardous substances and petroleum products.

In November 1984, RCRA was amended and strengthened by Congress with the passing of the Federal Hazardous and Solid Waste Amendments (HSWA). These amendments required:

- Phasing out land disposal of hazardous waste;
- Increased enforcement authority for EPA;
- More stringent hazardous waste management standards; and
- Comprehensive underground storage tank program.

RCRA has been amended on two other occasions since HSWA:

- Federal Facility Compliance Act of 1992 – strengthened enforcement of RCRA at Federal facilities; and
- Land Disposal Program Flexibility Act of 1996 – provided regulatory flexibility for land disposal of certain wastes.

3.1.6 Toxic Substances Control Act (15 U.S.C. §2601)

The Toxic Substance Control Act (TSCA) of 1976 was enacted by Congress to give EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environment or human health hazard. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. EPA then can control these chemicals as necessary to protect human health and the environment.

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TSCA supplements other Federal statutes, including the Clean Air Act and the Toxic Release Inventory under Emergency Planning and Community Right-to-Know Act (EPA, 2008c).

3.1.7 Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health and the environment. Over five years, \$1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL (EPA, 2007b).

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3.1.8 Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA made several important changes to the complex Superfund program:

- Stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites;
- Required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- Provided new enforcement authorities and settlement tools;
- Increased State involvement in every phase of the Superfund program;
- Increased the focus on human health problems posed by hazardous waste sites;
- Encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- Increased the size of the trust fund to \$8.5 billion.

SARA also required the EPA to revise the Hazard Ranking System (HRS) to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL (EPA, 2007c).

3.1.9 Emergency Planning and Community Right-To-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted by Congress on October 17, 1986. It grew out of a grass roots right-to-know movement at the state and local level, with labor unions and citizen activists working together towards a common goal: greater protection of the public from chemical emergencies and dangers through public disclosure by business and industry of the chemicals they store, use, and release.

One part of the law requires businesses to report on emissions of certain toxic chemicals, and that information is placed into the Toxics Release Inventory, a publicly-accessible data bank. Another part of the law requires certain businesses to report releases of extremely hazardous chemicals to state and local authorities, and to disclose to those same authorities the quantities and types of toxic chemicals stored on site (EPA. 2007d).

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3.2 State Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act was approved by the California legislature in 1969. It established a regulatory program to protect water quality and to protect beneficial uses of the state waters. The Porter-Cologne Act established the State Board and the regional boards as the principle state agencies responsible for control of water quality. The Act provides that (RWQCB-San Diego Region, 1994):

- The quality of all waters of the state (ground water and surface water) shall be protected for the use and enjoyment by the people of the state; and
- Activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality that is reasonable, considering all demands being made or to be made and the total values involves, beneficial and detrimental, economic and social, tangible and intangible.

3.2.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) was enacted in 1970. CEQA requires state and local public agencies to identify the environmental impacts of proposed discretionary activities or projects, determine if the impacts will be significant, and identify alternatives and mitigation measures that will substantially reduce or eliminate significant impacts to the environment (California State Parks, 2008).

3.2.3 California Hazardous Waste Control Act

The California Hazardous Waste Control Act (HWCA) was passed in 1972. It authorizes the California State Department of Toxic Substances Control and local certified unified program (CUP) agencies to regulate facilities that generate or treat hazardous waste. The HWCA authorizes CUP's to perform the following actions (San Francisco, undated):

- Conduct inspections of any factory, plant, construction site, waste disposal site, transfer station, establishment or any other place or environment where hazardous wastes are stored, handled, processed, disposed of, or being treated to recover resources;
- Maintain records of compliance with the Hazardous Waste Control Act;
- Require hazardous waste generators as provided herein, to pay inspection and administration fees to cover the costs of administering the provisions in this

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Article. Such fees may include but shall not be limited to the costs of inspection, document development and processing, recordkeeping, enforcement activities, and informational materials development and distribution;

- Issue authorization for on-site treatment of hazardous waste to persons eligible to operate pursuant to permit-by-rule, conditional authorization or conditional exemption; and
- Enforce against violations of the HWCA.

3.2.4 Carpenter-Presley-Tanner Hazardous Waste Substances Account Act

In 1981, the Carpenter-Presley-Tanner Hazardous Waste Substances Account Act created the Hazardous Substances Account and established a fee schedule on the land disposal of hazardous waste to cover the costs of remedial activities and associated administrative costs, hazardous substance response equipment, health effects studies, and the expenses of the Hazardous Waste cleanup Arbitration panel (DTSC, 2006).

3.2.5 Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (Proposition 65) was approved by voters in 1986. It requires the Governor to publish, and update at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. The lead agency for implementation of Proposition 65 is the California Office of Environmental Health Hazard Assessment (OEHA) of the California Environmental Protection Agency. The Act provides two mechanisms for listing chemicals (OEHA, 1997):

- A chemical is listed if a body considered to be authoritative by the state's qualified experts has formally identified it as causing cancer or reproductive toxicity; and
- A chemical is listed if a state or federal agency has formally required that the chemical be labeled or identified as causing cancer or reproductive toxicity.

3.2.6 Certified Unified Program Agency

In 1993, Senate Bill 1082 created the Certified Unified Program Agency (CUPA) to foster effective partnerships between local, state and federal agencies. The program consolidated the administrative, permits, inspections, and enforcement activities of the following environmental and emergency management programs (Cal EPA, 2008):

- Hazardous Materials Release Response Plans and Inventories (Business Plans);

DRAFT

- California Accidental Release Prevention Program;
- Underground Storage Program;
- Aboveground Petroleum Storage Act Program;
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs;
and
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

CUPA is implemented at the local level by government agencies certified by the Secretary of California Environmental Protection Agency. The CUPA for the City is the San Bernardino County Fire Department.

3.2.7 California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) is a merging of the federal Accidental Release Prevention Program and state programs for the prevention of accidental release of regulated toxic and flammable substances. It replaces the California Risk Management and Prevention Program and was created to eliminate the need for two separate and distinct risk management programs.

Stationary sources with more than a threshold quantity of regulated substances shall be evaluated to determine the potential for and impacts of accidental releases from that covered process. Under certain conditions, the owner or occupant of a stationary source may be required to develop and submit a risk management plan (California OES, 2004).

3.3 Federal Agencies

3.3.1 Environmental Protection Agency

In July of 1970, the White House and Congress worked together to establish the EPA. The mission of the EPA is to protect human health and the environment through the following tasks:

- Develop and enforce regulations;
- Offer financial assistance;
- Perform environmental research;
- Sponsor voluntary partnerships and programs; and

DRAFT

- Further environmental education; and publish information.

The EPA headquarters is located in Washington DC with ten regional offices throughout the United States. Rancho Cucamonga located in Region 9, which oversees California, Nevada and Arizona. The Region 9 office is located in San Francisco, California (EPA, 2008d).

3.4 State Agencies

3.4.1 California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) was created in 1991 by Governor's Executive Order. The mission of Cal/EPA is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality. The following agencies were placed within the Cal/EPA "umbrella" to create a cabinet level voice for protection of human health and the environment and to assure the coordinated deployment of State resources (Cal/EPA, 2007):

- Air Resources Board;
- Department of Pesticide Regulation;
- Department of Toxic Substances Control;
- Integrated Waste Management Board;
- Office of Environmental Health Hazard Assessment; and
- State Water Resources Control Board.

3.4.2 Department of Toxic Substance Control

The Department of Toxic Substances Control (DTSC) began in the early 1970's as a unit of the Vector and Waste Management Branch of the Department of Health Services. The mission of the DTSC is to provide the highest level of safety, and to protect public health and the environment from toxic harm. The DTSC operates programs to (DTSC, 2007):

- Deal with the aftermath of improper hazardous waste management by overseeing site cleanups;
- Prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store and dispose of wastes do so properly;
- Take enforcement actions against those who fail to manage hazardous wastes appropriately;

DRAFT

- Explore and promote means of preventing pollution, and encourage reuse and recycling;
- Evaluate soil, water and air samples taken at sites, and develop new analytical methods;
- Practice other environmental sciences, including toxicology, risk assessment, and technology development; and
- Involve the public in DTSC's decision making

3.4.3 State Water Resources Control Board and Regional Water Quality Control Board

In 1967, the State Water Resources Control Board was created by the State Legislature to protect water quality by setting statewide policy, coordinating and supporting the Regional Water Board efforts, and reviewing petitions that contest Regional Board actions. The State Board is also solely responsible for allocating water rights.

The State is divided into nine regions for the purposes of regional administration of California's water quality control program. Each of the nine regions has a California Regional Water Quality Control Board comprised of nine part-time members that are appointed by the Governor. The regional boards are responsible for adoption and implementation of water quality control plans, issuance of waste discharge requirements, and performing other functions concerning water quality control within their region (RWQCB-San Diego Region, 1994).

Rancho Cucamonga is located in the California Regional Water Control Board Santa Ana Region with its office in Riverside.

3.4.4 Office of Environmental Health Hazard Assessment

In the 1950s, the Office of Environmental Health Hazard Assessment (OEHHA) began as an air epidemiology unit of the Department of Public Health. On July 17, 1991 OEHHA came into its own with the formation of Cal/EPA. OEHHA's vision is to be California's leading scientific organization for evaluating risks to human and ecological health (OEHHA, 2007). Their functions and responsibilities include (OEHH, 2007a):

- Developing health-protective exposure standards for different media to recommend to regulatory agencies including ambient air quality standards for the

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Air Resources Board and drinking water chemical contaminant standards for the Department of Health Services;

- Carrying out special investigations of potential environmental causes of illness, diseases and deaths. Current and recent activities include investigation of the health effects of air pollutants, pesticides, and other chemical exposures;
- Continuing public health oversight of environmental regulatory programs within Cal/EPA;
- Making recommendations to the Department of Fish and Game and the State Water Resources Control Board with respect to sport and commercial fishing in areas where fish may be contaminated;
- Assessing health risks to the public from air pollution, pesticide and other chemical contamination of food, seafood, drinking water, and consumer products;
- Providing guidance to local health departments, environmental departments, and other agencies with specific public health problems, including appropriate actions to take in emergencies that may involve chemicals; and
- Implementing the provisions of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

3.5 Local Agencies

3.5.1 County of San Bernardino Environmental Health Services

The County of San Bernardino Environmental Health Services is the local agency primarily regulating hazardous waste in the City of Rancho Cucamonga. At a minimum, they perform the following tasks:

- Inspect/permit small community and non-community water systems that serve water to the public;
- Protect water sources from pollution by permitting and inspecting construction and destruction of wells;
- Review/approve sewage disposal reports to protect underground water source;
- Inspect/permit liquid waste pumps;
- Evaluate/comment on Environmental Impact Reports;
- Ensure environmental health considerations are included in development projects;
- Provide environmental health input to various County committees, including the Planning Commission and the Board of Supervisors;

DRAFT

- Inspect/permit solid waste facilities (landfills, transfer stations, composting facilities);
- Inspect/permit refuse vehicles;
- Monitor landfill postclosure conditions; and
- Inspect/regulate medical waste generators.

3.5.2 San Bernardino County Fire Department, Hazardous Materials Division

The San Bernardino County Fire Department, Hazardous Materials Division is responsible for protecting the health and safety of the public and the environment of the County by assuring that hazardous materials are properly handled and stored. This is accomplished through inspection, emergency response, site remediation, and hazardous management services. Specific responsibilities include (SBCFD, undated):

- Operating collection facilities and events for residents of San Bernardino County to safely dispose of household hazardous waste;
- Providing affordable waste management alternatives to businesses that generate very small quantities of waste through the conditionally Exempt Small Quantity Generator Program;
- Inspecting hazardous material handlers and hazardous waste generators to ensure full compliance with laws and regulations. Implementing Certified Unified Program Agency (CUPA) programs for the development of accident prevention and emergency plans, proper installation, monitoring, and closure of underground tanks, and the handling, storage, transportation, and disposal of hazardous waste;
- Providing 24-hour response to emergency incidents involving hazardous materials or wastes in order to protect the public and the environment from accidental releases and illegal activities;
- Overseeing the investigation and remediation of environmental contamination due to releases from underground storage tanks, hazardous waste containers, chemical processes, or the transportation of hazardous materials;
- Conducting investigations and taking enforcement action as necessary against anyone who disposes of hazardous waste illegally or otherwise manages hazardous materials or wastes in violation of federal, state, or local laws and regulations; and
- Providing Hazardous Materials Division information to the public and to other agencies upon request.

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3.5.3 Rancho Cucamonga Fire Protection District

The Rancho Cucamonga Fire Protection District (Fire District) is responsible for providing and managing numerous programs for the efficient delivery of fire protection and emergency medical services, as well as other emergency preparedness and response programs. The Fire District also implements underground storage tank abandonment's and removals in the City.

The Fire District has a Hazardous Material (Hazmat) Team that consists of 15 Hazardous Material Specialists who are trained and certified to take corrective action to prevent or contain the spread of hazardous materials from a spill, explosion or fire. A typical Hazmat Response would consist of the closest Medic Engine, Hazmat unit, Fire Investigator and the Battalion Chief. Additionally, the Fire District certifies all suppression personnel annually in First Responder Operational training. Hazmat team members train monthly in order to maintain proficiencies, critique calls, and share information about new and changing hazards within the City.

Rancho Cucamonga has also established a Conditionally Exempt Small Quantity Generator (CESQG) Program in cooperation with the San Bernardino County Fire Department. The CESQG (nicknamed- "squeegee") program allows the Fire District to mitigate small spills without delay reducing clean-up costs for businesses and the City.

The Haz-Mat Team also participates in a Joint Powers Authority (JPA) with five other surrounding agencies including Ontario International Airport Fire Department. The JPA offers additional trained staff and equipment as needed in the event of a large scale incident. Participating JPA cities gather together quarterly for deployment exercises and training.

All Hazmat Team members maintain memberships with the San Bernardino County Hazardous Materials Responders Association (SBCHMRA). This membership provides team members access to monthly training and a network for additional Grant funding through the Department of Homeland Security (DHS).

DRAFT

3.5.4 Rancho Cucamonga Household Hazardous Waste Facility

The City of Rancho Cucamonga and the San Bernardino County Fire Department operate a Household Hazardous Waste Facility located at 12158 Baseline Road. This facility accepts many household products that may contain potentially hazardous ingredients which are illegal to dispose in the garbage, down the storm drains, or onto the ground surface. The facility accepts: motor oil and filters; cleaning products; weed killers; paints and paint thinners; drain cleaners; pesticides and fertilizers; batteries; and electronic waste. The facility does not accept: business waste; radioactive waste; explosives; asbestos; tires; large appliances; and medical waste.

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4.0 REGULATORY REVIEW

LGI conducted a review of federal, state, tribal, and local regulatory agency database lists of environmentally impacted sites in order to assess the potential for hazardous waste in Rancho Cucamonga. The following section includes our review of regulatory agency records for the City.

4.1 Regulatory Agency Databases

EDR conducted an environmental regulatory agency database search of environmentally impaired sites located in the City and is the basis for our hazardous materials analysis special study. LGI requested that EDR extend the search distance approximately ¼-mile beyond the City boundary to ensure that we captured all Sites which may be located at or near the City boundary.

Because the environmental databases may not have been updated by the regulatory agencies for a period of up to one year (depending on the database and the agency), the database search conducted herein may not necessarily list all facilities or sites recently identified as having, or which are suspected of having environmental problems and for which an environmental investigation/listing has been initiated, or reflect the current status of activities at a particular site, subsequent to the last update of a given list.

Presented below is a summary of the databases reviewed and the number of facilities identified in each database. Appendix A presents the reports provided by EDR, a description of each database, and the database revision date.

Regulatory Agency Database Search Results		
Databases	Description	Sites Listed
Federal Records		
NPL	National Priority List.	0
Proposed NPL	Proposed National Priority List Sites	0
Delisted NPL	National Priority List Deletions	0

DRAFT

Regulatory Agency Database Search Results (continue)		
Databases	Description	Sites Listed
NPL Liens	Federal Superfund Liens	0
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	0
CERC-NFRAP	CERCLIS No Further Remedial Action Planned	8
LIENS 2	CERCLA Lien Information	0
CORRACTS	Corrective Action Report	2
RCRA-TSDF	Resource Conservation and Recovery Act Information - Transport, Store and Disposal	1
RCRA-LQG	Resource Conservation and Recovery Act- Large Quantity Generator	24
RCRA-SQG.	Resource Conservation and Recovery Act - Small Quantity Generator	163
RCRA-CESQG	Resource Conservation and Recovery Act - Conditionally Exempt Small Quantity Generators	1
RCRA-NonGen	Resource Conservation and Recovery Act-Non Generators	25
US ENG Controls	Engineering Controls Sites List	0
US Inst Controls	Sites with Institutional Controls	0
ERNS	Emergency Response Notification System	58
HMIRS	Hazardous Materials Information Reporting System	4
DOT OPS	Incident and Accident Data	0
US CDL	Clandestine Drug Labs	1
US Brownfields	A Listing of Brownfields Sites	0
DOD	Department of Defense Sites	0
FUDS	Formerly Used Defense Sites	0
LUCIS	Land Use Control Information System	0
CONSENT	Superfund (CERCLA) Consent Decrees.	0
ROD	Records of Decision.	0
UMTRA	Uranium Mill Tailings Sites	0
ODI	Open Dump Inventory	0
Debris Region 9	Torres Martinez Reservation Illegal Dump Site Locations	0

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Regulatory Agency Database Search Results (continue)		
Databases	Description	Facilities Listed
MINES	Mines Master Index File	0
TRIS	Toxic Chemical Release Inventory System	20
TSCA	Toxic Substances Control Act	3
FTTS	Federal Insecticide, Fungicide & Rodenticide Act / Toxic Substances Control Act Tracking System	17
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	17
SSTS	Section 7 Tracking Systems	0
ICIS	Integrated Compliance Information System	7
PADS	PCB Activity Database System	5
MLTS	Material Licensing Tracking System	1
RADINFO	Radiation Information Database	0
FINDS	Facility Index System/Facility Registry System	292
RAATS	RCRA Administrative Action Tracking System	0
State and Local Records		
Hist Cal-Sites	Calsites Database	1
CA Bond Exp. Plan	Bond Expenditure Plan	0
SCH	School Property Evaluation Program	8
Toxic Pits	Toxic Pits Cleanup Act Sites	0
SWF/LF	Solid Waste Facilities/Landfill Sites	3
CA WDS	Waste Discharge System	60
WMUDS /SWAT	Waste Management Unit Database	3
Cortese	“Cortese” Hazardous Waste & Substance Sites List	29
SWRCY	Recycler Database	10
LUST	Leaking Underground Storage Tank Incident Reports	35
CAL FID UST	Facility Inventory Database	84

DRAFT

Regulatory Agency Database Search Results (continue)		
Databases	Description	Facilities Listed
SLIC	Statewide Spills, Leaks, Investigation & Cleanup Cost Recovery Cases	5
UST	Active Underground Storage Tank Facilities	58
HIST UST	Historical Underground Storage Tank Registered Database	94
AST	Aboveground Petroleum Storage Tank Facilities	5
LIENS	Environmental Liens Listing	0
SWEEPS UST	Statewide Environmental Evaluation and Planning System UST Listing	101
CHMIRS	California Hazardous Material Incident Report System	116
Notify 65	Proposition 65 Records	1
DEED	Deed Restriction Listing	0
VCP	Voluntary Cleanup Program Properties	2
DRYCLEANERS	Cleaner Facilities.	42
WIP	Well Investigation Program Case List	1
CDL	Clandestine Drug Labs	45
RESPONSE	State Response Sites	1
HAZNET	Facility and Manifest Data	967
AIRS	Aerometric Information Retrieval System	137
HAULERS	Registered Waste Tire Hauler Listing	1
ENVIROSTOR	EnviroStor Database	16
Tribal Records		
INDIAN RESERV	Indian Reservations	0
Indian ODI	Report on the Status of Open Dumps on Indian Land	0

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Regulatory Agency Database Search Results (continue)		
Databases	Description	Facilities Listed
Indian LUST	Leaking Underground Storage Tanks on Indian Land	0
Indian UST	Underground Storage Tanks on Indian Land.	0
EDR Proprietary Records		
Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants	0

4.2 Summary of Applicable Database Facilities

Because of the large volume of data, LGI prepared the following sections and Tables 1 through 43 to present a brief description of each database and a list of Sites for each applicable database as reported by EDR. The Sites listed on the Tables in this section are also presented on Figure 2.

LGI attempted to summarize the most relevant information for each applicable Site that was provided by EDR, however, additional information is also available in Appendix A. Please note that several of the Sites are identified in several databases and their name may appear in more than one table.

Each Site has been assigned a unique map identification number (i.e. 150-23) by EDR which can be found in Tables 1 through 43, Figure 2, and the Focus Maps in Appendix A. The first part is a unique Site identification number (150) and the second portion is the map grid location (23). The Focus maps in Appendix A also provide additional detail as to the location of the Site and surrounding features.

A few of the databases provided by EDR were not discussed in this report for the following reasons: database was not active; database contained Sites with routine disposal of small quantities of hazardous waste; database included emergency cleanups of relatively small spills; and/or the Sites will be addressed in other reports prepared for the General Plan Update (i.e. air releases).



LGI has not confirmed that the information provided in the EDR databases is accurate by reviewing files at the applicable regulatory agency. We have not confirmed that the Site locations are correct by checking the locations in the field. However, LGI has no reason to believe that the information is not accurate. Some of the Site names and/or addresses appear to have not been misspelled or may have been truncated because they were too long. LGI reported the name and/or location exactly as reported in the database, unless additional information was provided in the EDR reports, which clarifies the spelling, Site name, or address.

Numerous orphan sites were listed in the EDR database. These are sites in which EDR was unable to properly locate the facility. Some of these locations may be in the City, however, locating and plotting these Sites was beyond LGI's scope of work.

LGI requested that EDR extend the search distance approximately ¼-mile beyond the City boundary to ensure that we obtained information for each facility listed in the City. All applicable Sites listed in the database were tabulated and summarized in Tables 1 through 43, however, a Site that is not located in Rancho Cucamonga will not be discussed in Section 5.0.

Sites which LGI believes contain or may potentially contain hazardous materials are highlighted in bold in Tables 1 through 43 and tabulated in Section 5.0.

4.2.1 Comprehensive Environmental Response, Compensation and Liability Information System – No Further Remedial Action Planned (CERC-NFRAP)

EDR reported there were eight CERC-NFRAP Sites in the City (Table 1). These are archived sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List, unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

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4.2.2 Correction Action Report (CORRACTS)

EDR reported there were two CORRACTS Sites in the City (Table2). These are waste handlers with RCRA Correction Action Activity.

4.2.3 Resource Conservation and Recovery Act Information – Transport, Store, and Disposal Facility (RCRA-TSDF)

EDR reported there was one RCRA-TSDF Site in the City (Table 3). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Transporters are individual or entities that move hazardous waste from the generator offsite to a facility than can recycle, treat, store, or dispose of the waste. TSDF's treat, store or dispose of the waste.

4.2.4 Resource Conservation and Recovery Act Information – Large Quantity Generator (RCRA-LQG)

EDR reported there were 24 RCRA-LQG Sites in the City (Table 4). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Large quantity generators generate over 1,000 kilograms (2,200 pounds) of hazardous waste, or over one kilogram (2.2 pounds) of acutely hazardous waste per month.

4.2.5 Resource Conservation and Recovery Act Information –Small Quantity Generator (RCRA-SQG)

EDR reported there were 163 RCRA-SQG Sites in the City (Table 5). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Small quantity generators generate between 100 kilogram (220 pounds) and 1,000 kilograms (2,200 pounds) of hazardous waste per month. The RCRA-SQG's were not tabulated due to the large number of the facilities. However, if any of these facilities had a spill, leak, or release, they will be listed and discussed in one of the other databases. The facilities listed in this database generally include dry cleaners, markets, photo processing facilities, service stations, car washes, auto body shops, and home improvement stores.

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4.2.6 Resource Conservation and Recovery Act Information –Conditionally Exempt Small Quantity Generator (RCRA-CESQG)

EDR reported there was one RCRA-CESQG Site in the City (Table 6). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Conditionally exempt small quantity generators generate less than 100 kilogram (220 pounds) of hazardous waste, or less than 1 kilogram (2.2 pounds) of acutely hazardous waste per month.

4.2.7 Resource Conservation and Recovery Act Information –Non Generator (RCRA-NonGen)

EDR reported there were 25 RCRA-NonGen Sites in the City (Table 7). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Non-generators do not presently generate hazardous waste.

4.2.8 Emergency Response Notification System (ERNS)

EDR reported there were 58 ERNS Sites in the City (Table 8). The ENRS records and stores information on reported releases of oil and hazardous substances. The source of this database is the EPA.

4.2.9 Hazardous Materials Information Reporting System (HMIRS)

EDR reported there were four HMIRS Sites in the City (Table 9). The HMIRS contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the EPA.

4.2.10 Clandestine Drug Labs (US CDL)

EDR reported there was one US CDL Site in the City (Table 10). The U.S. Department of Justice provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites.

4.2.11 Toxic Chemical Release Inventory System (TRIS)

EDR reported there were 20 TRIS Sites in the City (Table 11). The TRIS identifies facilities that release toxic chemicals into the air, water and land in reportable quantities

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under SARA Title III. The source of this database is the EPA. The EDR database did not provide any information on these sites.

4.2.12 Toxic Substance Control Act (TSCA)

EDR reported there were three TSCA Sites in the City (Table 12). TSCA identifies manufacturers and importers of chemical substances included on the TSCA chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

4.2.13 Federal Insecticide, Fungicide and Rodenticide Act/ Toxic Substance Control Act Tracking System (FTTS)

EDR reported there were 17 FTTS Sites in the City (Table 13). FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA over the previous five years.

4.2.14 Federal Insecticide, Fungicide and Rodenticide Act/Toxic Substance Control Act Tracking System Administrative (HIST FTTS)

EDR reported there were 17 HIST FTTS Sites in the City (Table 14). HIST FTTS is a complete administrative case listing from the FIFRA/TSCA Tracking System for all 10 EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA and TSCA. Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates.

4.2.15 Integrated Compliance Information System (ICIS)

EDR reported there were seven ICIS Sites in the City (Table 15). The ICIS supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollution Discharge Elimination System program. The EDR database did not provide any information on these sites.

4.2.16 PCB Activity Database (PADS)

EDR reported there were five PADS Sites in the City (Table 16). PADS identified generators, transporters, commercial stores and/or brokers and disposers of PCBs who are

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required to notify the EPA of such activity. The source of this database is the EPA. The EDR database did not provide any information on these sites.

4.2.17 Material Licensing Tracking System (MLTS)

EDR reported there was one MLTS Site in the City (Table 17). MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and are subject to NRC licensing requirements.

4.2.18 Facility Index System/ Facility Registry System (FINDS)

EDR reported there were 292 FINDS Sites in the City (Table 18). FINDS contains both facility information and “pointers” to other sources of information that contain more detail. The source of this database is the EPA/NTIS. The FINDS database will not be tabulated due to the large number of Sites. However, if any of these facilities have had a spill, leak, release, or are contaminated, they will be listed and discussed in one of the other databases.

4.2.19 Cal-Sites Database (HIST Cal-Sites)

EDR reported there was one HIST Cal-Sites Site in the City (Table 19). HIST Cal-Sites, formerly known as ASPIS, contain both known and potential hazardous substances sites. The Source is the DTSC. This database is no longer updated by the DTSC and has been replaced by ENVIROSTOR.

4.2.20 School Property Evaluation Program (SCH)

EDR reported there were eight SCH Sites in the City (Table 20). SCH contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category, depending on the level of threat to public health and safety or the environment they pose.

4.2.21 Solid Waste Facilities/Landfill Sites (SWF/LF)

EDR reported there were three SWF/LF Sites in the City (Table 21). SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board’s Solid Waste Information System database.

DRAFT

4.2.22 California Water Resources Control Board – Waste Discharge System (CA WDS)

EDR reported there were 60 CA WDS Sites in the City (Table 22). California Water Code Section 13260 requires that persons discharging or proposing to discharge waste to land or surface water that could affect the quality of the waters of the state, other than a community sewer system, must file a Report of Waste Discharge. A National Pollution Discharge Elimination System permit is also required if one proposes to discharge waste to surface waters.

4.2.23 Waste Management Unit Database System (WMUDS/SWAT)

EDR reported there were three WMUDS/SWAT Sites in the City (Table 23).

WMUDS/SWAT is used for program tracking and inventory of waste management units. The source of the database is the SWRCB and it is composed of eight databases: Facility; Waste Management Unit Information; Solid Waste Activity (SWAT) Tracking; SWAT Report Summary Information; Chapter 15; TPCA Program Information; RCRA Program Information; and Closure Information. A waste management unit is an area of land, or a portion of a waste management facility, at which waste is discharged. The term includes containment features and ancillary features for precipitation and drainage control and for monitoring.

4.2.24 Hazardous Waste and Substances Sites List (Cortese)

EDR reported there were 29 Cortese Sites in the City (Table 24). The Site for this list are designated by the SWRCB (LUST), the IWB (SWF/LF), and the DTSC (Cal-Sites). This listing is no longer updated by the state agency. The Sites on this list will not be tabulated since this list is no longer updated and the sites are listed in Tables 19, 21, and 26.

4.2.25 Recycler Database (SWRCY)

EDR reported there were 10 SWRCY Sites in the City (Table 25). SWRCY is a list of recycling facilities in California. Recycling centers collect products or materials at the end of their useful life so they can be turned into raw materials to make another product. These facilities collect: plastic bottles; aluminum cans; glass bottles; cardboard; mixed paper; and scrap metal. These facilities do not accept hazardous or electronic waste.

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4.2.26 Leaking Underground Storage Tank Incident Reports (LUST)

EDR reported there were 35 LUST Sites in the City (Table 26). LUST contains an inventory of reported leaking underground storage tank incidents. The data comes from the SWRCB Leaking Underground Storage Tank Information System.

4.2.27 Facility Inventory Database (CA FID UST)

EDR reported there were 84 CA FID UST Sites in the City (Table 27). CA FID UST contains active and inactive underground storage tank locations. The source of the database is the SWRCB. The CA FID UST database generally does not provide information on the number and size of the USTs, dated installed, and the UST contents. This information was obtained from the SWEEPS UST database, if available, which is usually provided in conjunction with the CA FID UST database.

4.2.28 Statewide Spills, Leaks, Investigation and Cleanup Cost Recovery Cases (SLIC)

EDR reported there were five SLIC Sites in the City (Table 28). SLIC Region comes from the California Regional Water Quality Control Board. The EDR databases did not provide any details on the sites.

4.2.29 Active Underground Storage Tank Database (UST)

EDR reported there were 58 UST Sites in the City (Table 29). The UST database contains registered USTs which are regulated under Subtitle I of RCRA. The data come from the SWRCB's Hazardous Substance Storage Container database. The database did not provide any information regarding the capacity and/or contents of the USTs.

A UST is a tank or any underground piping connected to the tank that has at least 10 percent of its combined volume underground. Until the mid-1980's, most USTs were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment. The greatest potential hazard for a leaking UST is that the petroleum or other hazardous substances can seep into the soil and contaminate groundwater, the source of drinking water for nearly half of all Americans. A leaking UST can present other health and environmental risks, including the potential for fire and explosion (EPA, 2008e).

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4.2.30 Historical Underground Storage Tank Registered Database (HIST UST)

EDR reported there were 94 HIST UST Sites in the City (Table 30). The HIST UST database contains historical registered USTs.

4.2.31 Above Ground Storage Tank Facilities Database (AST)

EDR reported there were five AST Sites in the City (Table 31). The data comes from the SWRCB.

ASTs are tanks or other containers that are above ground, partially buried, bunkered, or in a subterranean vault. Some of the causes for storage tank releases are holes from corrosion, failure of piping systems, and spills and overfills, as well as equipment failure and human operational error. Storage tank releases can contaminate soil and drinking water supplies (EPA, 2001).

4.2.32 Statewide Environmental Evaluation and Planning System (SWEEPS UST)

EDR reported there were 101 SWEEPS UST Sites in the City (Table 32). This UST listing was updated and maintained by a company contracted by the SWRCB in the early 1990's, however, the listing is no longer updated or maintained. The SWEEPS UST database generally contains the number of tanks at the Site, tank status, tank capacity, and tank contents. The Sites on this list were not tabulated separately since this list is no longer maintained, however, the majority of the information from this database was included in Table 27 (CA FID UST Sites) since these databases were generally reported together.

4.2.33 California Hazardous Material Incident Report System (CHMIRS)

EDR reported there were 116 CHMIRS Sites in the City (Table 33). CHMIRS contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services. The Sites on this list were not tabulated since: these accidental releases were most likely cleaned up immediately by first responders; the majority of the incidents do not have a facility name and only include the address; and if any of the sites are active they will most likely be included in another databases.

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4.2.34 Proposition 65 Reports (Notify 65)

EDR reported there was one Notify 65 Site in the City (Table 34). The data comes from the SWRCB and contain facility notifications about any releases that could impact drinking water and thereby expose the public to potential health risk. The database did not include any formation as to why this facility was included in the database.

4.2.35 Voluntary Cleanup Program (VCP)

EDR reported there were two VCP Site in the City (Table 35). The VCP contains low threat properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC costs.

4.2.36 Cleaner Facilities (DRYCLEANERS)

EDR reported there were 42 DRYCLEANER Sites in the City (Table 36). This database contains a list of dry cleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

4.2.37 Well Investigation Program Case List (WIP)

EDR reported there was one WIP Site in the City (Table 37). This database contains program cases in the San Gabriel and San Fernando Valley area. No detail was presented in the database regarding this Site.

4.2.38 Clandestine Drug Labs (CDL)

EDR reported there were 45 State CDL Sites in the City (Table 38). The CDL data is provided by the DTSC. The listing of a location does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require cleanup work. No details were presented in the database regarding these Sites.

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4.2.39 State Response Sites (RESPONSE)

EDR reported there was one RESPONSE Sites in the City (Table 39). This database identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

4.2.40 Facility and Manifest Data (HAZNET)

EDR reported there were 967 HAZNET Sites in the City (Table 40). The HAZNET data is extracted from copies of the hazardous waste manifests received each year by the DTSC. The volume of manifests is typically 7000,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data are from the manifest are submitted without correction, and therefore may contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. The source is the DTSC.

The Sites on the HAZNET list were not tabulated due to the large number of sites. The large quantity generators are included in Table 4 and any facility with a release or spill will most likely be included in another databases. The list of HAZNET sites is included in Appendix A.

4.2.41 Aerometric Information Retrieval System (AIRS)

EDR reported there were 137 AIRS Sites in the City (Table 41). The AIRS database contains toxics and criteria pollutant emissions collected by the Air Resources Board and air pollution agencies. The AIRS Sites were not tabulated since air quality will covered under the Public Health and Safety portion of the General Plan Update. The list of AIRS sites is included in Appendix A.

4.2.42 Registered Waste Tire Haulers (HAULERS)

EDR reported there was one HAULER Site in the City (Table 42). This database identifies registered waste tire haulers.

4.2.43 EnviroStor Database (ENVIROSTOR)

EDR reported there were 16 ENVIROSTOR Sites in the City (Table 43). The DTSC Site Mitigation and Brownsfields Reuse Program EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further.

DRAFT

The database includes the following site types: Federal Superfund sites; State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor includes similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

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5.0 CONCLUSION

Based on a review of the databases provided by EDR, LGI has prepared a list of facilities which have a high potential or known release of hazardous substances into the ground, groundwater or surface waters of the Site and which are or would be the subject of enforcement action by an appropriate regulatory agency. LGI identified 46 Sites in the City which were listed on one or more of the following databases:

- Large quantity generator (RCRA-LQG);
- Toxic chemical release inventory system (TRIS);
- Integrated compliance information system (ICIS);
- Active school property evaluation program cases which need evaluation (SCH);
- Waste management units (WMUDS/SWAT);
- Active leaking underground storage tank cases (LUST);
- Active statewide spills, leaks, investigation and cleanup cost recovery cases (SLIC);
- Proposition 65 reports (Notify 65); and
- Active EnviroStor cases (ENVIROSTOR).

The facilities that match one or more of these criteria are located in the following table along with their address, referenced database, and EDR map identification number.

Site Name	Address	Referenced Database	Map ID
Hellman Elementary School	6 th Street / Hellman /Avenue	SCH, ENVIROSTOR	679-36
Brownwood Furniture Incorporated	9805 6 th Street Suite 104	ICIS	680-37
Hartwell Corporation	9810 6 th St	RCRA-LQG	680-37
Not Reported	12150 6 th St.	RCRA-LQG	654-39
Mobil Oil Corporation 11-AJ-6	8477 Archibald	Notify 65	416-30,31
Not Reported	8477 Archibald Ave	RCRA-LQG	416-30,31
Frito-Lay Inc (F/K/A Recot	9535 Archibald Ave	TRIS	713-36,37
Intermetro Industries Corporation	9393 Arrow Hwy	RCRA-LQG	432-30

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Site Name	Address	Referenced Database	Map ID
Steelscape Incorporated	11200 Arrow Route	RCRA-LQG, TRIS, ICIC	415-32
Schlosser Forge Company	11711 Arrow Route	TRIS	440-32
Soil Treatment, Rancho Cucamon	12167 Arrow Route	WMUDS/SWAT	443-33
Not Reported	12281 Arrow Route	RCRA-LQG	445-33
Parallel Products of California	12281 Arrow Route	TRIS	445-33
CMC Fontana Steel	12451 Arrow Route	TRIS	446-33
Ameron International	12455 Arrow Rt	TRIS	446-33
Ameron Intl Concrete & Steel Pipe GRP	12455 Arrow Route	WMUDS/SWAT, TRIS	446-33
Tamco	12459 Arrow Hwy	RCRA-LQG, TRIS	481-39
TI Wire	12459 Arrow Hwy A	RCRA-LQG	481-39
Metal Coaters of California, Inc.	9133 Center Ave	RCRA-LQG, TRIS, ICIS	639-37
Sterling Can Corporation	8939 Etiwanda Ave	SLIC	589-39
Generating Station, Etiwanda	8996 Etiwanda Avenue	WMUDS/SWAT	573-39
Unocal #6972	9082 Foothill Blvd	LUST	303-30
Not Reported	12549 Foothill Blvd	RCRA-LQG	326-33
Not Reported	5885 Haven Ave	RCRA-LQG	38-17
Terra Vista Cleaners	7211 Haven Ave	RCRA-LQG	156-24
Degussa Construction Chemicals Operations, Inc.	9060 Haven Ave	TRIS	626-37
Not Reported	8613 Helms Ave	RCRA-LQG	471-30,36
Vacuum Metalizing Company, Inc	8740 Hellman Ave	RCRA-LQG, ICIS	489-36

DRAFT

Site Name	Address	Referenced Database	Map ID
Arlon Materials for Electronics Division	9433 Hyssop Dr	RCRA-LQG, TRIS	699-38,39
Not Reported	8786 Industrial Lane	RCRA-LQG	517-36
Western Metal Decorating Company	8875 Industrial Lane	TRIS	566-36
Robert Manufacturing Co	10667 Jersey Blvd.	RCRA-LQG, TRIS	523-37
PAC Rancho, Inc.	11000 Jersey Blvd	RCRA-LQG, TRIS	518-38
Precision Aerospace Corporation	11155 Jersey Blvd Suite K	TRIS	530-38
Rancho Cucamonga Fire Station #174	11239 Jersey Boulevard	LUST	532-38
General Latex and Chemical Corporation	11266 Jersey Blvd.	TRIS	531-38
Mission Foods Rancho Cucamonga	11559 Jersey Blvd	ICIS	505-38
Not Reported	10477 Lemon Ave	RCRA-LQG	60-17
Not Reported	6539 Milliken	RCRA-LQG	111-25
Innovative Polymer Systems Inc.	8530 Milliken Ave	TRIS	457-32
Chevron 301784	8075 Monet Ave	RCRA-LQG	295-33
Not Reported	9121 Pittsburg Ave	RCRA-LQG	637-38
Studio 1	9060 Rancho Park Court	RCRA-LQG	623-36
Pacer Technology	9420 Santa Anita Av	ICIS	708-39
Alshin Tire Corp	11060 Tacoma Dr	TRIS	473-32,38
Etiwanda High School Expansion	Victoria Avenue / East Ave	SCH, ENVIROSTOR	126-27

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6.0 LIMITATIONS

LGI performed the activities cited herein in accordance with generally-accepted professional practice standards for this type of work. LGI believes the analysis performed and the conclusions and recommendations developed to be accurate and relevant. However, certain information contained in this report may have been rightfully provided to LGI by third parties or other outside sources. LGI does not make any warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

The judgments, conclusions, and recommendations described in this report pertain to the conditions judged to be present or applicable at the time the work was performed. Future conditions may differ from those described herein and this report is not intended for use in future evaluations unless an update is conducted by a consultant familiar with environmental assessments. This report has been prepared solely for the use of Hogle-Ireland, City of Rancho Cucamonga, their agents, and their legal counsel, as it pertains to the General Plan Update. The purpose of this assessment was to provide information about hazardous/toxic materials in the City. Any reliance on, or use of, this report by any third party shall be at such party's sole risk.

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7.0 REFERENCES

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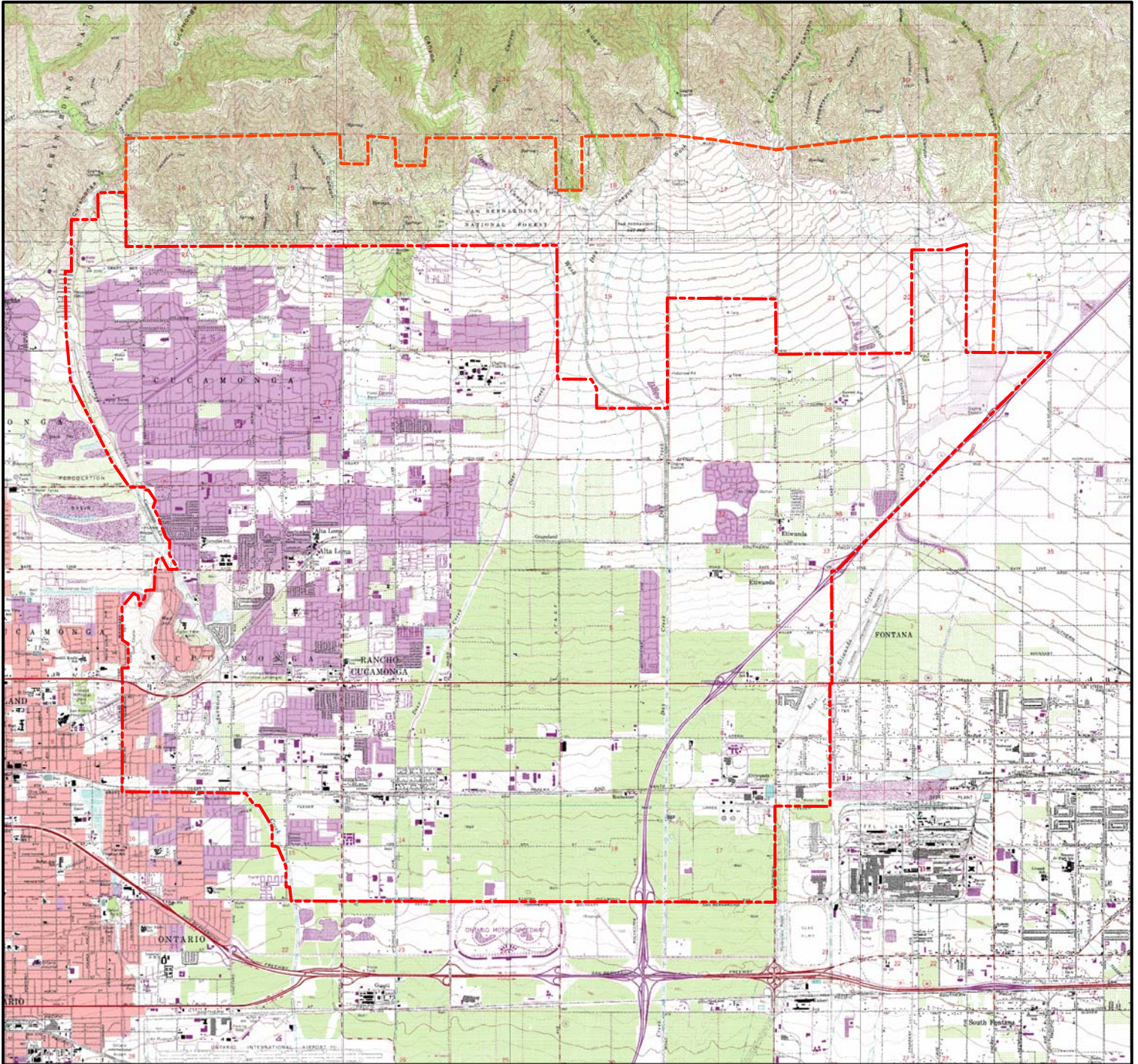
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FIGURES

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LEGEND

- - - - RANCHO CUCAMONGA CITY BOUNDARY
- · - · - SPHERE OF INFLUENCE

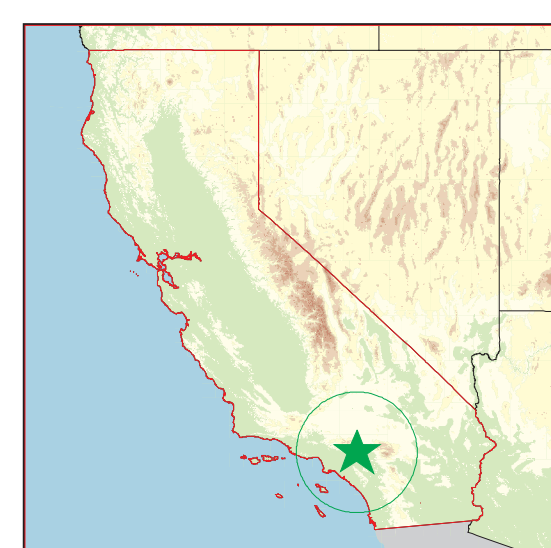
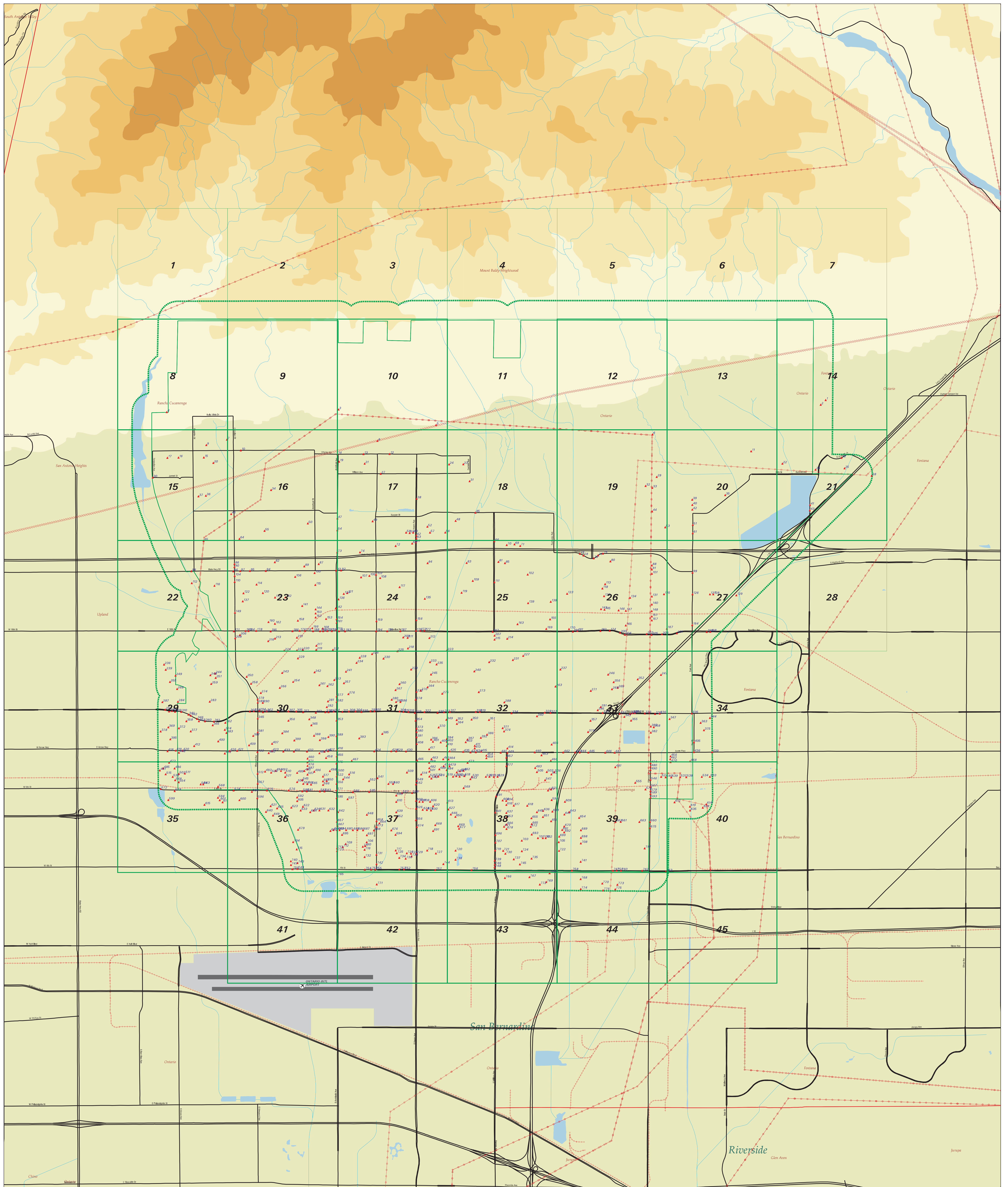
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APPROXIMATE

Scale 0 7000 feet

<p>Laguna Geosciences, Inc. <small>Geotechnical & Environmental Consultants</small></p>	LGI Project Number: E08-0042	VICINITY MAP	FIGURE NO.
	Date: AUGUST 2008	SPECIAL STUDIES-HAZARDOUS MATERIALS ANALYSIS GENERAL PLAN UPDATE RANCHO CUCAMONGA, CALIFORNIA	1



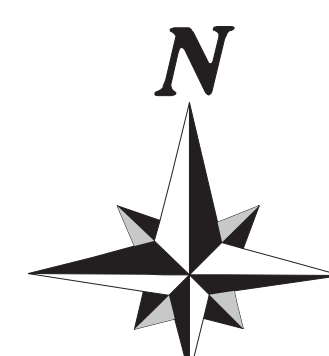
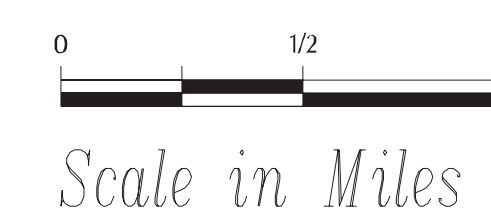
EDR DataMap® – Environmental Atlas

Rancho Cucamonga General Plan Update



Legend

- | | | | | |
|---------------|----------------|------------|-------------------------|--|
| Roads | Waterways | Pipelines | Superfund Sites | Listed Sites |
| Major Roads | Study Boundary | Powerlines | Federal DOD Sites | Earthquake Epicenters (Richter 5 or greater) |
| Contour Lines | Fault Lines | Railroads | Indian Reservations BIA | |
| | Water | | | |



TABLES

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TABLE 1

**Comprehensive Environmental Response, Compensation and Liability Information System
– No Further Remedial Action Planned (CERC-NFRAP)**

CERC-NFRAP Site	Address	Date Archived	Map ID
American Can Co	7125 Amethyst St	7/1/85	150-23
Tamco	12459 Arrow Hwy	6/21/94	481-39
Robert Manufacturing Co	10667 Jersey Blvd.	1/23/96	523-37
Vista Metals Corp	13435 Whittram Ave., Fontana	11/1/98	534-40
Colen Nathan & Sons Inc.	8866 Vincent	7/20/90	569-38
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	1/23/96	614-40
Foseco Cucamonga	7th Off Rochester Av	11/1/88	638-38
Hartwell Corporation	9810 6 th St	5/1/85	680-37

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TABLE 2

Correction Action Report (CORRACTS)

CORRACTS Site	Address	Corrective Action Priority	Map ID
Robert Manufacturing Co	10667 Jersey Blvd.	Low	523-37
Hartwell Corporation	9810 6 th St.	Low	680-37

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TABLE 3

Resource Conservation and Recovery Act Information – Transport, Store, and Disposal Facility (RCRA-TSDF)

RCRA-TSDF Site	Address	Facility Status	Map ID
Matheson Div. Searle Med Products Inc.	8800 Utica Ave. & Jersey Blvd.	Non-generator	525-37

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TABLE 4**Resource Conservation and Recovery Act Information – Large Quantity Generator (RCRA-LQG)**

RCRA-LQG Site	Address	Waste Type(s)	Reported Violations	Map ID
Not Reported	5885 Haven Ave	Batteries, D001 (ignitable), D002 (corrosive), PCE, mercury, dimethyl-benzene	No	38-17
Not Reported	10477 Lemon Ave	D001 (ignitable)	No	60-17
Not Reported	6539 Milliken	D001(ignitable), lead, benzene, PCE	No	111-25
Terra Vista Cleaners	7211 Haven Ave	F002 (spent halogenated solvents)	No	156-24
Chevron 301784	8075 Monet Ave	D018 (benzene)	No	295-33
Not Reported	12549 Foothill Blvd	D011 (silver)	No	326-33
Steelscape Incorporated	11200 Arrow Route	Batteries, lamps, 132, 135, 172, 181, 212, 222, 352, 491, D001 (ignitable), D002 (corrosive), D003 (reactive), D004 (arsenic), D005 (barium), D006 (cadmium), D007 (chromium), D008 (lead), D009 (mercury), D010 (selenium), D011 (silver), D035 (methyl ethyl ketone), F001 (halogenated solvents used in degreasing), F002 (halogenated solvents), F003 (non-halogenated solvents), F005 (spent non-halogenated solvents), and F019 (wastewater treatment sludge)	Yes	415-32
Not Reported	8477 Archibald Ave	D001 (ignitable)	No	416-30,31

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TABLE 4 (continued)

RCRA-LQG Site	Address	Waste Type(s)	Reported Violations	Map ID
Intermetro Industries Corporation	9393 Arrow Hwy	171, 181, 723, D007 (chromium), F006 (electroplating operations)	No	432-30
Not Reported	12281 Arrow Route	214, D001 (ignitable)	No	445-33
Not Reported	8613 Helms Ave	No information reported	No	471-30,36
Tamco	12459 Arrow Hwy	K061 (emission control dust/sludge from the primary production of steel)	Yes	481-39
TI Wire	12459 Arrow Hwy A	D001 (ignitable), D002 (corrosive), D006 (cadmium), D007 (chromium), F003 (spent non-halogenated solvent),	Yes	481-39
Vacuum Metalizing Company, Inc	8740 Hellman Ave	D001 (ignitable), F003 (spent non-halogenated solvents)	Yes	489-36
Not Reported	8786 Industrial Lane	D002 (corrosive), D011 (silver), F006 (wastewater treatment sludge)	No	517-36
PAC Rancho, Inc.	11000 Jersey Blvd	D001 (ignitable), D002 (corrosive)	Yes	518-38
Robert Manufacturing Co	10667 Jersey Blvd.	135, 223, 352, D006 (cadmium), D007 (chromium), D008 (lead)	Yes	523-37
California Steel Industries, Inc.	14000 San Bernardino Ave, Fontana	122, 134, 135, 141, 151, 181, 213, 221, 223, 241, 261, 331, 343, 352, 491, 512, 611, 723, 731, 791, D001 (ignitable), D002 (corrosive), D004 (arsenic), D005 (barium), D006 (cadmium), D007 (chromium), D008 (lead), D035 (methyl ethyl ketone), D039 (PCE), F003 (spent non-halogenated solvents), F005 (spent non-halogenated solvents)	Yes	614-40
Studio 1	9060 Rancho Park Court	D011 (silver)	No	623-36
Not Reported	9121 Pittsburg Ave	Not reported	No	637-38

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TABLE 4 (continued)

RCRA-LQG Site	Address	Waste Type(s)	Reported Violations	Map ID
Metal Coaters of California, Inc.	9133 Center Ave	Batteries, lamps, 134, 181, 212, 214, 221, 261, 352, D002 (corrosive), D007 (chromium), D035 (methyl ethyl keytone), F001 (spent halogenated solvents used in degreasing), F002 (spent halogenated solvents), F005 (spent non-halogenated solvents)	Yes	639-37
Not Reported	12150 6th St.	Not Reported	No	654-39
Hartwell Corporation	9810 6th St	D001 (ignitable), D002 (corrosive), D03 (reactive), D006 (cadmium), D007 (chromium), F006 (wastewater treatment sludges from electroplating operations)	Yes	680-37
Arlon Materials for Electronics Division	9433 Hyssop Dr	132, 133, 343, 352, D001 (ignitable), D002 (corrosive), D004 (arsenic), D007 (chromium), D008 (lead), D035 (methyl ethyl keytone), F003 (spent non-halogenated solvents), F005 (spent non-halogenated solvents)	No	699-38,39

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TABLE 5

Resource Conservation and Recovery Act Information –Small Quantity Generator (RCRA-SQG)

The RCRA-SQG's were not tabulated due to the large number of the facilities. However, if any of these facilities had a spill, leak, or release, they will be listed and discussed in one of the other databases.

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TABLE 6

Resource Conservation and Recovery Act Information –Conditionally Exempt Small Quantity Generator (RCRA-CESQG)

RCRA-CESQG Site	Address	Map ID
Pacific Fuel Service	8979 Alder St	216-23

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TABLE 7**Resource Conservation and Recovery Act Information –Non Generator (RCRA-NonGen)**

RCRA NonGen Site	Address	Map ID
Brewer Charles M Trucking Co	10763 Beechwood Dr	24-17-18
Duane Partida	5673 Grand Prix Ct	25-21
BIOHAZORB	7087 Marigold Ct	146-26
Young, Allan & Sons	7460 Marine Ave	218-24,31
Costco Wholesale No 449	12649 Foothill Blvd	343-33
Tri State Environmental Servic	8460 Maple Pl STE 106	392-32
County Wide Truck Service	10244 Arrow Hwy	428-31
New Day Construction Co Inc	9567 Arrow Rte Bldg 1 S	434-30
Pacific Bell	Arrow Hwy & Milliken Av	449-32
Earth Potection Services Inc	8747 Flower St	504-36
Matheson Div Searle Med Prod I	8800 Utica Ave & Jersey	525-37
Chaparral Trucking	8729 Etiwanda	546-39
Lithonia Hi Tek Poles West	8886 Vincent Ave	569-38
KVAC Environmental Services In	8910 Rochester	570-38
K VAC Environmental Services I	9567 8 th St	583-36
Hughes Missile Systems Co	8924 Milliken Ave	591-38
Armando Rodriguez DBA A Rodrig	1758 E Olive St	600-36
Hughes Missile Sys Co	9050 Utica Ave	620-37
Youngs Disposal Co Inc	9401 Etiwanda Ave W-16	624-40
Mendez Trucking	1722 N Hacendia Dr	625-36
Capitol Hydraulics	10825 7 th #C	627-37,38
Safetran Systems Corporation	10655 7 th Street	629-37
Richard Mills Associates Inc	9624 Hermosa Ave	742-37
General Dynamics Valley System	9654 Turner Ave	742-37
Hughes Missile Systems Co	10900 E 4 th St	756-38,43

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TABLE 8**Emergency Response Notification System (ERNS)**

ERNS Site	Address	Description	Map ID
Lucky Supermarket	6315 Haven Ave.	1/13/99-2 gal. sulfuric acid released from a broken plastic bottle at super market.	63-17,24
8391 Orange St	8391 Orange St	1/1/96-wind blew down pole in road with 5 transformers.	65-12,22
10615 Monte Vista St	10615 Monte Vista St	2/28/92-vandals poured hydrochloric acid on a car.	135-24
7009 Etiwanda	7009 Etiwanda	8/20/92-10 gal. oil released from damaged unknown tank during excavation.	140-26
7105 Carnelian St	7105 Carnelian St	9/26/90-2 gal. unknown material dumped into storm drain.	149-23
9601 Lomita Ct	9601 Lomita Ct	10/30/92-450 lbs. liquid oxygen dumped.	153-23
Nabisco Foods Co.	12467 Baseline Blvd	5/30/91-found broken, uncapped pipe and abandoned UST. Unknown quantity #2 fuel spill.	174-26
Haven & Baseline Rds	Haven & Baseline Rds	11/23/90-backhoe ruptured natural gas line.	175-24
Corner of Baseline & Etiwanda Ave.	Corner of Baseline & Etiwanda Ave.	3/12/91-orange fuel line ruptured. 75 gal. diesel fuel spilled.	205-26
9494 Palo Alto St	9494 Palo Alto St	2/5/02-dump truck spilled unknown quantity of hydraulic oil.	219-23,30
Etiwanda Ave at Foothill Blvd	Etiwanda Ave at Foothill Blvd.	4/14/93-driver tore off fuel transfer line from saddle tank of truck. Spilled 30 gal. diesel fuel.	252-33
9479 Foothill Blvd	9479 Foothill Blvd	10/21/91-butal cellusolve used to remove mastif from floor tile caused 11 people to become sick.	313-30
Arco Service Station #1721	9533 Foothill Blvd.	10/16/90-drilled through product line. 20 gal. gasoline spilled.	313-30
10576 Foothill Blvd	10576 Foothill Blvd	9/29/90-muratic acid fell off cart. Unknown quantity spilled.	322-31
I-15 Btwn Foothill Blvd/San Bernardino Hwy.	I-15 Btwn Foothill Blvd/San Bernardino Hwy.	10/3/88-sulfur smell from unknown source.	326-33
8200 Haven Ave	8200 Haven Ave	12/1/07-truck dumped 3.8 gal. motor oil into storm drain.	354-31

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TABLE 8 (continued)

ERNS Site	Address	Description	Map ID
1401 East Arrow Highway	1401 East Arrow Highway	11/1/94-vehicle left automated gas station. Spilled 133 gal. diesel fuel.	418-29
1401 E Arrow Hwy	1401 E. Arrow Hwy	11/1/94-vehicle left automated gas station. Spilled 133 gal. diesel fuel.	418-29
Mobil Oil Service Station	8514 Vineyard Ave	6/9/92-customer overfilled tank, spilled 3 gal. gasoline.	422-30
Liquid Air, Bldg. 3	12550 Arrow Route	8/1/90-feedline had small leak, spilled 15 gal. sulfuric acid.	447-33
M. Press	9605 Business Center Dr	9/21/93-unknown quantity of printing ink spilled in storm drain.	458-30
8408 Rocherster Ave	8408 Rocherster Ave	8/12/92-welding machine caught on fire releasing acetylene gas.	466-32,38
9292 9 th St	9292 9 th St	10/19/92-6 gal. heptane spilled from overfill tanked during transfer.	489-36
9292 9 th St	9292 9 th St	10/19/92-6 gal. heptane spilled from overfill tanked during transfer.	489-36
Avery Dennison	9292 9 th Street	9/16/93-unknown quantity of lactol spirits leaked from storage tank.	489-36
Avery Dennison	9292 9 th Street	9/16/93-unknown quantity of lactol spirits leaked from storage tank.	489-36
Avery Dennison	9292 9 th Street	9/16/93-unknown quantity of lactol spirits leaked from storage tank.	489-36
Avery Dennison	9292 9 th Street	9/16/93-unknown quantity of lactol spirits leaked from storage tank.	489-36
9292 9 th St	9292 9 th St	8/5/91-employee knocked over drum and spilled 55 gal. heptane.	489-36
9292 9 th St	9292 9 th St	8/5/91- employee knocked over drum and spilled 55 gal. heptane.	489-36
9490 9 th St	9490 9 th St	1/18/91-100 gal. discharged into storm drain from fire in hydroxol polyol system.	496-36
8809 Grove Ave	8809 Grove Ave	5/15/92-30 lb. sodium hydroxide abandoned in street.	502-35
Bernell Hydraulics	8810 Etiwanda Ave	10/2/98-50 or more 55-gal. drums of hydraulic and motor oil knocked over and/or overfilled. Material reached storm drain.	567-39
Wagner Insulation	11899 8 th St	5/12/93-unknown quantity and material reportedly dumped on ground.	570-38
8 th St Between Helman & Vineyard Street	8 th St Between Helman & Vineyard Street	3/29/91-abandoned 3 5-gal. containers of carburetor cleaner.	575-36



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TABLE 8 (continued)

ERNS Site	Address	Description	Map ID
Oregon Steel Mill	1400 San Bernardino Ave., Fontana	3/12/93-spilled 200 lb. copper concentrate from rail car.	614-40
Kemiron Pacific, Inc.	1400 San Bernardino Ave., Fontana	2/10/99-1 lb. chlorine leaked due to flange corrosion.	614-40
CA Steel Corp.	1400 San Bernardino Ave., Fontana	7/21/92-spilled 8 lb. mercury.	614-40
CA Steel Industries, Inc.	1400 San Bernardino Ave., Fontana	7/21/92-spilled 8 lbs. mercury in tin mill.	614-40
Kent Electric	1400 San Bernardino Ave., Fontana	11/14/05-transformer damaged by equipment causing leak of 3 gal. PCBs.	614-40
California Steel	1400 San Bernardino Ave., Fontana	8/12/93-control instrument damaged during removal resulting in release of 1 lb. of mercury.	614-40
Kemiron Pacific, Inc.	1400 E San Bernardino Ave., Fontana	6/3/98-transmission pipeline cut by contractor releasing 500 gal. ferrous chloride.	614-40
CA Steel Industries, Inc.	1400 San Bernardino Ave., Fontana	9/7/05-15 gal. PCBs released from transformer being prepared for disposal.	614-40
CA Steel Industries, Inc.	1400 San Bernardino Ave., Fontana	11/13/99-valve closed during transfer causing spill of 300 gal. of lubricating oil.	614-40
California Steel	1400 San Bernardino Ave.	8/12/93-control instrument damaged during removal resulting in release of 1 lb. of mercury.	614-40
G&B, Inc.	10825 7 th St	6/19/92-battery distribution center spills unknown quantity of battery acid into sewer.	627-37,38
California Finished Metals	9133 Center Ave	12/20/93-2,000 gal. of zinc/chromium/oil mixed with water spills from open tank into flood control channel.	639-37
2051 E. Caroline	2051 E. Caroline	10/8/91-pipe installed to kill neighbors tree with various chemicals. Quantity and type of chemicals unknown.	649-36
Hartwell Co	9810 6 th Street	3/6/00-500 gal. caustic acid released to storm drain due to sprinkler runoff.	680-37

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TABLE 8 (continued)

ERNS Site	Address	Description	Map ID
Hartwell Corp.	9810 6 th St	6/8/93-plating system materials (cadmium) were absorbed through the floor from 1968-1990.	680-37
Frito Lay	9535 Archibald Ave	9/2/03-200 gal. waste water released into storm drain from treatment plant due to malfunction of level control system.	713-36,37
Frito Lay	9535 Archibald Ave	1/16/01-300 gal. waste water overflowed from a concrete pit into the storm drain.	713-36,37
Frito Lay	9535 Archibald Ave	4/6/06-200 gal. storm water containing small amount of cooking oil spilled into Deer Creek channel while draining a containment pit.	713-36,37
Frito Lay	9535 Archibald Ave	12/4/02-100 gal. waste water released into storm drain from equipment failure at waste water treatment facility.	713-36,37
Frito Lay	9535 Archibald Ave	3/19/01-400 gal. process water released into storm drain from a power failure at a waste water treatment plant.	713-36,37
Frito Lay	9535 Archibald Ave	11/9/03-a probe in the grease separator failed causing 100 gal. of waste water to overflow into storm drain.	713-36,37
PBS Building System, Inc.	9550 Hermosa Ave	7/15/94-truck spilled 100 gal. diesel fuel.	731-37
10900 4 th ST	10900 4 th St	1/12/91-1 lb. mercury spilled from jar.	756-38,43

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TABLE 9

Hazardous Materials Information Reporting System (HMIRS)

HMIRS Site	Address	Map ID
Not Reported	1400 Monte Vista Ave	239-29
Not Reported	8865 White Oak Avenue	569-38
Not Reported	11400 Newport Drive	602-38
Not Reported	905 N Wineville Ave	774-44

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TABLE 10

Clandestine Drug Labs (US CDL)

US CDL Site	Address	Seizure Date	Map ID
1506 E Highland Ct	1506 E Highland Ct	7/26/04	615-35

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TABLE 11**Toxic Chemical Release Inventory System (TRIS)**

TRIS Site	Address	Map ID
Steelscape Incorporated	11200 Arrow Route	415-32
Schlosser Forge Company	11711 Arrow Rte	440-32
Parallel Products of California	12281 Arrow Rt	445-33
Ameron International	12455 Arrow Rt	446-33
CMC Fontana Steel	12451 Arrow Rte	446-33
Innovative Polymer Systems Inc	8530 Milliken Ave	457-32
Alshin Tire Corp	11060 Tacoma Dr	473-32,38
Tamco	12459 Arrow Hwy	481-39
PAC Rancho Foundry	11000 Jersey Blvd	518-38
Robert Manufacturing Co	10667 Jersey Blvd	523-37
Precision Aerospace Corporation	11155 Jersey Blvd Suite K	530-38
General Latex and Chemical Corporation	11266 Jersey Boulevard	531-38
Vista Metals Corp	13435 Whittram Ave, Fontana	534-40
Western Metal Decorating Company	8875 Industrial Lane	566-36
Kemiron Pacific Inc	14000 E. San Bernardino, Fontana	614-40
California Steel Industries, I	14000 San Bernardino Av, Fontana	614-40
Degussa Construction Chemicals Operations, Inc.	9060 Haven Ave	626-37
Metal Coaters of California, I	9133 Center Ave	639-37
Arlon Materials for Electronics Division	9433 Hyssop Dr	699-38,39
Frito-Lay NA Inc (F/K/A Recot	9535 Archibald Ave	713-36,37

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TABLE 12

Toxic Substance Control Act (TSCA)

TSCA Site	Address	Chemical	Map ID
Parallel Products of California	12281 Arrow Route	Manufactures ethanol	445-33
USL Parallel Products of CA	12281 Arrow Route	Manufactures ethanol	445-33
Parallel Products-Cucamonga	12281 Arrow Route	Manufactures ethanol	445-33

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TABLE 13**Federal Insecticide, Fungicide and Rodenticide Act/ Toxic Substance Control Act Tracking System (FTTS)**

FTTS Site	Address	Chemical/ Legislative Code	Map ID
Etiwanda Elementary SD	5959 East Ave	Asbestos	39-20
Jim & Mary Woods Residence	7830 Klusman	PCBs	262-30
Parallel Products	12281 Arrow Highway	TSCA	445-33
Vacuum Metalizing Company, Inc	8740 Hellman Ave	EPCRA non-reporting	489-36
Earth Protection Services, Inc	8747 Flower Street	PCB's	504-36
Robert Manufacturing Co	10667 Jersey Blvd	EPCRA	523-37
Precision Aerospace Corporation	11155 Jersey Blvd Ste A	EPCRA	530-38
Cucamonga Elementary School District	8776 Archibald Ave	Asbestos	556-36,37
Mission Plastics Inc	8975 Cottage Ave	EPCRA	597-37
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	PCB/TSCA	614-40
Master Builders Inc	9060 Haven Ave	TSCA	626-37
Global Tube	9401 Etiwanda Ave	TSCA	660-39
Ultrashield Products International, Inc	10096 Sixth St, Unit p	FIFRA	688-37
Pacer Technology	9420 Santa Anita Way	PCB/TSCA, EPCRA	698-39
Pacer Technology	9420 Santa Anita Way	TSCA	708-39
Pacific Coast Mfg Co	9535 Archibald Ave	EPCRA	713-36,37
RPM Merit	12250 4 th St	EPCRA	760-39,44

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TABLE 14**Federal Insecticide, Fungicide and Rodenticide Act/Toxic Substance Control Act Tracking System Administrative (HIST FTTS)**

HIST FTTS Site	Address	Chemical/ Legislative Code	Map ID
Etiwanda Elementary SD	5959 East Ave	Asbestos	39-20
Jim & Mary Woods Residence	7830 Klusman	PCBs	262-30
Parallel Products	12281 Arrow Highway	TSCA	445-33
Vacuum Metalizing Company. Inc	8740 Hellman Ave	EPCRA enforcement	489-36
Earth Protection Services, Inc	8747 Flower Street	PCB	504-36
Robert Manufacturing Co	10667 Jersey Blvd	EPCRA	523-37
Precision Aerospace Corporation	11155 Jersey Blvd Ste A	EPCRA	530-38
Cucamonga Elementary School District	8776 Archibald Ave	Asbestos	556-36,37
Mission Plastics Inc	8975 Cottage Ave	EPCRA	597-37
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	PCB/TSCA	614-40
Master Builders Inc	9060 Haven Ave	TSCA	626-37
Global Tube	9401 Etiwanda Ave	TSCA	660-39
Ultrashield Products International, Inc.	10096 Sixth St, Unit p	FIFRA	688-37
Pacer Technology	9420 Santa Anita Way	PCS/TSCA, EPCRA	698-39
Pacer Technology	9420 Santa Anita Way	TSCA	708-39
Pacific Coast Mfg Co	9535 Archibald Ave	EPCRA	713-36,37
RPM Merit	12250 4 th St	EPCRA	760-39,44

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TABLE 15

Integrated Compliance Information System (ICIS)

ICIS Site	Address	Map ID
Steelscape Incorporated	11200 Arrow Route	415-32
Vacuum Metalizing Company Inc	8740 Hellman Ave	489-36
Mission Foods Rancho Cucamonga	11559 Jersey Blvd	505-38
California Steel Industries In	14000 San Bernardino Av, Fontana	614-40
Metal Coaters of California	9123 Center Avenue	639-37
Brownwood Furniture Incorporated	9805 6th Street Suite 104	680-37
Pacer Technology	9420 Santa Anita Av	708-39

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TABLE 16

PCB Activity Database (PADS)

PADS Site	Address	Map ID
General Environmental Management, Inc	11155 Jersey Blvd., Unit G	530-38
Armando Rodriguez DBA A Rodriguez Transp	1758 E Olive St	600-36
Kemiron Pacific	14000 San Bernardino Ave., Fontana	614-40
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	614-40
Shields Industries Inc	9401 Etiwanda Ave Ste 1	660-39

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TABLE 17

Material Licensing Tracking System (MLTS)

MLTS Site	Address	Map ID
Foss Therapy Services	8794 Avalon St	122-23

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TABLE 18

Facility Index System/ Facility Registry System (FINDS)

The FINDS database was not tabulated due to the large number of Sites. However, if any of these facilities have had a spill, leak, release, or are contaminated, they will be listed and discussed in one of the other databases.

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TABLE 19

Cal-Sites Database (HIST Cal-Sites)

HIST Cal Site	Address	Map ID
Bredero Price Company	14000 San Bernardino Ave, Fontana	614-40

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TABLE 20**School Property Evaluation Program (SCH)**

SCH Site	Address	Past Use / Chemicals	Case Status	Closure Date	Map ID
West Banyon Alternative School	6012 East Ave	Agriculture Row Crops-arsenic, DDD, DDE, DDT, and lead	No Further Action	9/22/03	40-20
Etiwanda Early Education Center	6084 Etiwanda Avenue	Agriculture Row Crops-DDE, DDT, DDD, dibutyl phthalate, toxaphene, and dieldrin.	No Further Action	3/8/02	44-19
Etiwanda High School Expansion	Victoria Avenue/East Av	Agriculture Row Crop	Inactive-Needs Evaluation	NA	126-27
Etiwanda Elementary School	7128-7192 Etiwanda Aven	Agriculture Row Crops-lead	Certified	7/12/02	151-26
Arbors Elementary School	Victoria Park Lane/Baseline Road	Agriculture Row Crops-arsenic, chlorodane, DDD, DDE, DDT	No Further Action	2/8/05	204-26
Miller Elementary School	13051 Miller Avenue	Motor Oil	No Further Action	3/7/06	247-33
Mulberry Early Education Center	Archibald Avenue/Arrow Route	Residential Area-chlordane, DDD, DDE, DDT, and lead	No Further Action	5/13/02	416-30,31
Hellman Elementary School	6th Street/Hellman /Avenue	Agriculture Row Crops	Inactive-Needs Evaluation	NA	679-36



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TABLE 21

Solid Waste Facilities/Landfill Sites (SWF/LF)

SWF/LF Site	Address	Description	Facility Status	Map ID
Etiwanda Disposal Site	X	Solid Waste Disposal	Closed	129-27
West Valley Materials Recvr'y Facility	13373 Napa Street	Large volume transfer / processing	Active	619-40
Inland Empire Regional Composting Fac	12645 Sixth Street	Biosolids Composting	Active	661-39

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TABLE 22**California Water Resources Control Board – Waste Discharge System (CA WDS)**

CA WDS Site	Address	Site Status	Map ID
Chaffey Community College	5885 Haven Ave	Active	38-17
East Avenue	6061 East Ave	Active	42-20
CL Pharris Sand & Gravel Inc	8731 Orange St	Active	64-16,23
Hanson Aggregates West Inc	12082 Highland Ave	Active	76-26
American Medical Response	7925 Center Ave	Active	267-31
APL Logistics	8291 Milliken Ave	Active	376-32
Steelscape Incorporated	11200 Arrow Route	Active	415-32
R.F. White Co.	1401 E Arrow Hwy	Active	418-29
Searing Industries Inc.	8901 Arrow Rte	Active	422-30
Intermetro Industries Corporation	9393 Arrow Hwy	Active	432-30
Schlosser Forge Co	11711 Arrow Rte	Active	440-32
CMC Steel Fabricators Inc (DBA CMC Fontana)	12451 Arrow Rte	Active	446-33
Ameron Intl Concrete & Steel Pipe GRP	12455 Arrow Route	Active	446-33
Big Three Industries	12550 Arrow Rte	Active	447-33
Carson Industries	8613 Etiwanda Ave	Active	480-39
IWPAD Inc	12459 Arrow Rte	Active	481-39
Tamco	12459 Arrow Rt	Active	481-39
Future Marine & Fabrication In	1346 E 9 th St	Active	485-35
Avery Dennison	9292 9 th St	Active	489-36
Vacuum Metalizing Company Inc	8740 Hellman Avenue	Active	489-36
Ruan Trans Corp	8639 Etiwanda Ave	Active	490-39
Ted Ludford	8728 Utica Ave	Active	501-37
Mission Foods Rancho Cucamonga	11559 Jersey Blvd	Active	505-38
PAC Rancho, Inc.	11000 Jersey Blvd	Active	518-38
Commercial Carriers	10807 Jersey Blvd	Active	519-37,38
Hoffinger Industries Inc	10959 Jersey Blvd	Active	520-38
Robert Manufacturing Co	10667 Jersey Blvd	Active	523-37
Matheson Div Searle Med Prod I	8800 Utica Ave & Jersey	Active	525-37
Precision Aerospace Corporatio	11155 Jersey Blvd Suite	Active	530-38
General Latex and Chemical Corportion	11266 Jersey Blvd	Active	531-38

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TABLE 22 (continued)

CA WDS Site	Address	Site Status	Map ID
Vista Metals Corp	13435 Whittram Ave	Active	534-40
Kings Auto Wrecking	13292 Whittram	Active	538-40
Astro Equip Sales Inc.	13109 Whittram Ave	Active	539-39,40
Bills Auto Wrecking	13107 Whittram Ave	Active	539-39,40
Goodyear Rubber Co of Southern California	8833 Industrial Lane	Active	551-36
PAC Coast Recycling LLC	8822 Etiwanda Ave	Active	555-39
Omnitrans	9421 Feron Blvd Ste 101	Active	565-36
Wstrn Metal Decorating Co	8875 Industrial Ln	Active	566-36
Not Reported	8810 Etiwanda Ave	Active	567-39
Advanced Wire Technology	8876 Vincent Ave	Active	569-38
Etiwanda Generating Station	8996 Etiwanda Ave	Active	573-39
Allstate Paper & Metal Recycle	8889 Etiwanda Avenue	Active	579-39
Inland Empire Stages	9567 8 th St	Active	583-36
Not Reported	14000 San Bernardino Ave. (Fontana)	Active	614-40
West Valley Mrf LLC	13373 Napa St	Active	619-40
Haven Building Materials Inc	9060 Haven Ave	Active	626-37
Budway Trucking & Warehousing	13600 Napa Street	Active	635-40
Amcor Pet Packaging Inc	9121 Pittsburg Ave	Active	637-38
Metal Coaters of California	9133 Center Ave	Active	639-37
The Hartwell Corporation	9810 Sixth St	Active	680-37
Tomra Recycling Network	9910 E 6 th Street	Active	685-37
Turret Punch Co Inc	10050 6 th St Unit K	Active	687-37
Pacer Technology	9420 Santa Anita Ave	Active	698-39
Arlon Materials for Electronics Division	9433 Hyssop Dr	Active	699-38,39
Masonite Entry Doors	11778 San Marino St	Active	700-38
Stanley Door Systems	11778 San Marino	Active	700-38
Proficient Food Company	9408 Richmond Pl	Active	703-38
Cucamonga Traffic	9535 Archibald Ave	Active	713-36,37
El Dorado Stone	9550 Hermosa Ave	Active	731-37
Bluefield Associates	1100 N Hellman	Active	749-36,41



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TABLE 23

Waste Management Unit Database System (WMUDS/SWAT)

WMUDS/SCAT Site	Address	Site Description	Map ID
Soil Treatment, Rancho Cucamon	12167 Arrow Route	Solid waste facility where soil with designated wastes may be treated or stored.	443-33
Ameron Intl Concrete & Steel Pipe GRP	12455 Arrow Route	Facility treats or disposes of liquid or semisolid wastes.	446-33
Generating Station, Etiwanda	8996 Etiwanda Avenue	Industrial facility that treats or disposes of liquid or semisolid wastes.	573-39

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TABLE 24

Hazardous Waste and Substances Sites List (Cortese)

The Sites on this list were not tabulated since this list is no longer updated and the sites are listed in Tables 19, 21, and 26.

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TABLE 25

Recycler Database (SWRCY)

SWRCY Site	Address	Site Status	Map ID
Earth Wize Recycling/Stater Brothers #078	9750 19 th St	Active	92-23,24
The Vons #2147	8778 19 th St	Active	97-23
Victoria Village Cleaners	7270 Victoria Park Ln	Never Operational	165-26
Albertsons #6506	9775 Baseline Rd	Active	193-24
Ralphs #013	7369 Milliken Ave	Active	215-25
Albertsons No 6523	8850 Foothill Blvd	Active	298-30
Gustavo Serrano	8161 Foothill Blvd	Inactive	310-29
Allstate Paper & Metal Recycling Co	8889 Etiwanda Ave	Active	579-39
West Valley Mrf	13373 Napa ST	Active	619-40
Tomra Pacific Inc	9910 E 6 th St	Active	685-37

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TABLE 26**Leaking Underground Storage Tank Incident Reports (LUST)**

LUST Site	Address	Contents	Case Status	Date Closed	Map ID
Etiwanda Forrest Fire Station	6696 Etiwanda Ave	Regular fuel (soil only)	Closed	5/4/90	101-26
American Can, Inc.	7125 Amethyst Ave	Unleaded fuel (soil only)	Closed	6/16/87	150-23
Leland Scheu Property	9456 Roberds St	Gasoline (soil only)	Closed	2/3/98	166-23
Chevron #9-4863	8687 Baseline Rd	Gasoline (soil only)	Closed	8/19/97	171-23
Tosco/Circle K Store #5216	7287 Archibald Ave	Gasoline (soil only)	Closed	11/12/98	172-23,24
7-Eleven Store #13979	9464 Baseline Rd	Gasoline (soil only)	Closed	6/18/01	188-23
Aeroscientific Corporation/Data Design Labs	7925 Center Street	Copper (soil only)	Closed	3/28/89	267-31
R and M Service Station	10080 Foothill Blvd	Gasoline (soil only)	Closed	10/12/98	300-31
Unocal #6972	9082 Foothill Blvd	Contents not reported (soil only)	Open	NA	303-30
Thrifty Oil #320	9888 Foothill Blvd	Gasoline (soil only)	Closed	5/6/91	304-31
Deer Creek Car Wash	10340 Foothill Blvd	Diesel (soil only)	Closed	12/7/04	306-31
Rod's Food Mart/Texaco	8166 Foothill Blvd	Gasoline (drinking water aquifer affected)	Closed	4/11/02	310-29
A-1 Shell Auto Care / Value Gas	9524 Foothill Blvd	Gasoline (soil only)	Closed	7/21/03	313-30
Arco #1721	9533 Foothill Blvd	Gasoline (soil only)	Closed	2/10/04	313-30
Circle K #0989	12852 Foothill Blvd	Unleaded gasoline (soil only)	Closed	2/27/96	333-33
Mobil #18-AJ6	8477 Archibald Avenue	Gasoline (soil only)	Closed	11/5/01	416-30,31
R.F. White Co	1401 Arrow Hwy	Gasoline (soil only)	Closed	5/8/00	418-29

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TABLE 26 (continued)

LUST Site	Address	Contents	Case Status	Date Closed	Map ID
A and L Trucking	1471 Arrow Hwy	Diesel (soil only)	Closed	7/11/95	419-29
Air Liquide	12550 Arrow Rte	Diesel (soil only)	Closed	2/27/96	447-33
Pneu Draulics Inc	8575 Helms	Waste Oil (soil only)	Closed	5/23/97	460- 30,36
Ameron Steel and Wire	12459 Arrow Hwy	Diesel (soil only)	Closed	12/4/90	481-39
Tamco	12459 Arrow Hwy	Gasoline (soil only)	Closed	5/11/94	481-39
Avery Intl	9292 Ninth St	Mineral Spirits (soil only)	Closed	6/3/97	489-36
Jim's Texaco	8715 Grove Ave	Waste Oil (soil only)	Closed	5/8/96	502-35
Paragon Building Products	1337 Bowen St	Diesel (soil only)	Closed	10/19/94	515-35
Rancho Cucamonga Fire Station #174	11239 Jersey Boulevard	Not Reported (soil only)	Open	NA	532-38
California Steel Industries, Inc	14000 San Bernardino Ave, Fontana	Diesel (soil only)	Closed	3/4/92	614-40
Cumberland Swan	9817 7 th St	Isopropyl Alcohol (soil only)	Closed	7/26/91	642- 36,37
Pier 1 Imports	9160 Buffalo Ave	Diesel (soil only)	Closed	10/12/01	655-38
Ryder Truck Rentals	9366 Santa Anita Ave	Diesel (soil only)	Closed	6/20/94	689-39
Proficient Food Co	9408 Richmond Place	Diesel (soil only)	Closed	9/13/05	703-38
Laird Construction Company	9460 Lucas Ranch Rd	Diesel (soil only)	Closed	3/9/00	711-37
Ryder Truck Rental	9608 Santa Anita Ave	Diesel (soil only)	Closed	5/1/96	741-39
General Dynamics Facility	10900 4 th St Bldg #600	Hydrocarbons (soil only)	Closed	8/3/99	744-37
Pic N Save Distribution Center	12434 Fourth St	Gasoline (soil only)	Closed	8/6/99	762- 39,44

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TABLE 27**Facility Inventory Database (CA FID UST)**

CA FID UST Site	Address	Contents	UST Status	Map ID
Joe W. Masters	8552 Cherry Lane	1-280 gal. diesel fuel	Active	7-15,16
George Cherbak	9953 Hillside Rd	1-600 gal. regular unleaded fuel 1-250 gal. contents not reported	Active	13-17
Tolstoy Ranch	9686 Hillside Rd	1-550 gal. regular unleaded fuel	Active	14-16,17
Chaffey Community College	5885 Haven Ave	1-6,000 gal. regular unleaded fuel 1-550 gal. waste oil 1-550 gal. leaded fuel	Active	38-17
Mobil Oil (14-0003)	10477 Lemon	1-8,000 gal. regular unleaded fuel 1-10,000 leaded fuel 1-12,000 regular unleaded fuel 1-1,000 waste oil	Active	60-17
Unocal #7304	6411 Haven Ave	2-12,000 gal. regular unleaded fuel 1-550 gal. waste oil	Active	67-17,24
Stop & Go #2-1149	6760 Carnelian	3-contents and capacity not reported	Active	104-23
Steve De Ambrogio Individual	6778 Hellman	1-500 gal. leaded fuel	Active	106-23
Mobil Oil	6539 Milliken	3-10,000 gal. regular unleaded fuel 1-10,000 gal. leaded fuel	Active	111-25
Houtz & Sons	6942 Beryl St	1-500 gal. regular unleaded fuel	Active	133-23
Regina Builders	7090 Archibald Ave	1-1,000 gal. regular unleaded fuel	Active	142-23,24
Chevron #9-4863	8687 Baseline Rd	1-5,000 gal. contents not reported 2-10,000 gal. contents not reported 1-1,000 gal. contents not reported	Active	171-23
Stop & Go #2-674	7287 Archibald	4-capacity and contents not reported	Active	172-23,24
Mobil SMI (14-914)	9315 Baseline	1-1,000 gal. waste oil 1-8,000 gal. regular unleaded fuel 1-10,000 gal. leaded fuel 1-10,000 regular unleaded fuel	Active	176-23
7-Eleven Store #13979	9464 Baseline Dr	1-10,000 gal. regular unleaded fuel. 1-10,000 gal. leaded fuel 1-10,000 gal. "Gashol"	Active	188-23

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TABLE 27 (continued)

CA FID UST Site	Address	Contents	UST Status	Map ID
Cucamonga Fire Department	12858 Baseline Ave	1-4,000 gal. diesel fuel.	Active	202-26
Hawker Construction	9805 Church St	1-2,000 gal. diesel fuel	Active	241-31
Foothill Fire Dist	9612 San Bernardino Rd	2-capacity and contents not reported	Active	281-30
Gas Garden Inc	7996 Archibald Ave	1-10,000 gal. leaded fuel 1-10,000 gal. regular unleaded fuel 2-10,000 gal. contents not reported	Active	282-30,31
Red Hill Country Club	8358 Red Hill Country Club Dr.	2-capacity and contents not reported.	Active	283-29
City of Rancho Cucamonga	1111 N. Grove Ave	Not reported.	Active	284-29
Rancho San Antonio Med Ctr	7777 Milliken Ave	1-675 gal. diesel fuel	Active	288-32
Cucamonga County Water Distric	8055 Klusman	1-550 gal. diesel fuel 1-10,000 gal. leaded fuel 1-10,000 regular unleaded fuel	Active	292-30
Unocal #6972	9082 Foothill Blvd	3-12,000 gal. regular unleaded fuel 1-12,000 gal. diesel fuel	Active	303-30
Thrifty Oil Co Station #320 #320	9888 Foothill Blvd	1-15,000 gal. regular unleaded fuel 2-12,000 gal. leaded fuel 1-12,000 regular unleaded fuel 1-10,000 gal. regular unleaded fuel 1-8,000 gal. leaded fuel 1-8,000 gal. regular unleaded fuel 1-550 gal. waste oil	Active	304-31
Pep Boys Rancho Cucamonga	9292 Foothill Blvd	1-capacity and contents not reported	Active	305-30
Kramer Bros. Nurseries Inc.	8112 Foothill Blvd	1-4,000 gal. diesel fuel 1-550 gal. leaded fuel 1-2,000 gal. regular unleaded fuel	Active	310-29
Rod's Foodmart/ Texaco	8166 Foothill Blvd	1-8,000 gal. premium unleaded fuel 2-6,000 gal. regular unleaded fuel 4-4,000 gal. regular unleaded fuel 1-6,000 premium unleaded fuel	Active	310-29

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TABLE 27 (continued)

CA FID UST Site	Address	Contents	UST Status	Map ID
A-1 Shell Auto Care/Value Gas	9524 Foothill Blvd	4-capacity and contents not reported	Active	313-30
Arco #1721	9533 Foothill Blvd	4-4,000 gal. regular unleaded fuel 1-10,000 gal. regular unleaded fuel	Active	313-30
De Ambrogio Vineyards Inc	10385 Foothill Blvd	1-1,000 gal. leaded fuel 1-270 gal. leaded fuel	Active	315-31
General Telephone of CA	10428 Foothill Blvd	1-10,000 gal. regular unleaded fuel	Active	316-31
GTE/Cucamonga	10428 Foothill Blvd	1-capacity and contents not reported	Active	316-31
Mobil Oil	8477 Archibald	1-1,000 gal. waste oil 1-8,000 gal. regular unleaded fuel 1-10,000 gal. leaded fuel 1-12,000 gal. regular unleaded fuel	Active	416-30,31
RF White Co Inc #2971	1401 E. Arrow Hwy	1-10,000 gal. diesel fuel 1-10,000 leaded fuel 2-10,000 regular unleaded fuel 1-5,000 gal. diesel fuel 1-10,000 gal. diesel fuel	Active	418-29
Boyd Lumber Co	1400 E Arrow Hwy	1-1,000 gal. regular unleaded fuel 1-1,000 gal. diesel fuel	Inactive	418-29
A and L Trucking	1471 Arrow Hwy	1-capacity and contents not reported	Active	419-29
San Gabriel Valley Labor	8706 Arrow	1-capacity and contents not reported.	Active	421-30
Safetran Systems Inc	9271 Arrow Hwy	1-capacity and contents not reported.	Active	431-30
Phillips Industries Inc	9141 Arrow Hwy	1-capacity and contents not reported. 1-10,000 gal. diesel fuel 1-1,000 gal. regular unleaded fuel	Active	433-30
Schlosser Forge Company	11711 Arrow Rte	4-7,500 gal. diesel fuel	Active	440-32
Parallel Products	12281 Arrow RR	1-550 gal. regular unleaded fuel 1-10,000 gal. diesel fuel	Active	445-33
Chino Basin MWD	8555 Archibald Ave	1-5,000 gal. regular unleaded fuel	Active	455-30,21

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TABLE 27 (continued)

CA FID UST Site	Address	Contents	Case Status	Map ID
Pneu Draulics Inc	8575 Helms	1-capacity and contents not reported.	Active	460-30,36
Certified Insulation	8687 Utica Ave	1-capacity and contents not reported	Active	482-37
Avery Intl	9292 Ninth St	3-6,000 gal. contents not reported 4-2,000 gal. contents not reported 1-20,000 gal. contents not reported 3-10,000 gal. contents not reported 3-15,000 gal. contents not reported 2-20,000 gal. diesel fuel 10-2,000 gal. reclaimed chemical 1-6,000 gal. reclaimed chemical 1-2,000 gal. toluene base 1-2,000 gal. methanol 1-6,000 gal. mineral oil 1-6,000 gal. lactol spirit 1-10,000 gal. lactol spirit 3-10,000 gal. reclaimed chemical	Active	489-36
Future Marine	1364 E 009 th St	2-4,000 gal. regular unleaded fuel	Active	491-35
Jim's Texaco	8715 Grove St	1-8,000 gal. leaded fuel 2-5,000 gal. regular unleaded fuel 1-3,000 gal. regular unleaded fuel 1-280 gal. waste oil	Active	502-35
Albert W. Davies, Inc	8737 Helms Ave	1-500 gal. regular unleaded fuel 1-500 gal. leaded fuel	Active	507-36
Construction Yard	8801 Helms Ave	1-2,000 gal. diesel fuel 1-1,000 gal. leaded fuel	Active	507-36
California Concrete Products, I	1337 Bowen St	Not reported	Active	515-35
Printed Circuits Unlmted	8786 Industrial Lane	1-capacity and contents not reported	Active	517-36
Pacific Western Door Inc	10912 Jersey Blvd	1-capacity and contents not reported	Active	527-38

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TABLE 27 (continued)

CA FID UST Site	Address	Contents	Case Status	Map ID
SOC-Co Plastic Coating Company	11251 Jersey Blvd	1-4,000 gal. regular unleaded fuel 1-9,970 gal. diesel fuel 2-3,000 gal. contents not reported 2-2,000 gal. contents not reported 1-3,500 gal. "spill contain"	Active	532-38
Vista Metals Corp	13435 Whittram Ave	1-12,000 gal. diesel fuel 3-7,500 gal. diesel fuel 1-2,000 gal. diesel fuel 1-1,000 gal. leaded fuel	Active	534-40
Gas Haven Chevron	8777 Haven Ave	2-15,000 gal. regular unleaded fuel 1-15,000 leaded fuel	Active	549-37
Goodyear Rubber Co	8833 Industrial	3-capacity and contents not reported	Active	551-36
District of C/ Cucamonga	8776 Archibald Ave	1-1,000 gal. diesel fuel 1-2,000 gal. regular unleaded fuel	Active	556-36,37
Scheu Steel Supply Company	8830 Vineyard Ave	1-2,000 gal. diesel fuel 1-1,000 gal. regular unleaded fuel	Active	557-36
Viana Tool & Machine Inc	8909 Rochester Ave	1-4,000 gal leaded fuel 1-4,000 regular unleaded fuel	Active	570-38
Owen Electric	8889 Archibald Ave	1-2,000 gal. regular unleaded fuel 1-4,000 gal. regular unleaded fuel	Active	571-36,37
Ontario Seventh-Day Adventist	1722 E 008 th St	1-500 gal. regular unleaded fuel	Active	578-35
Luther A Hayden	9567 8 th St	1-10,000 gal. waste oil 1-1,000 leaded fuel 1-10,000 gal. diesel fuel	Active	583-36
American Foods	10037 E 8 th St	1-15,000 gal. alcohol 1-10,000 gal. regular unleaded fuel 1-550 gal. waste oil 2-10,000 gal. contents not reported	Active	585-37
Peralez, Frank J	1829 N Baker	2-contents and capacity not reported	Active	594-35
Lee's Way Trucking	9000 Pittsburg	2-capacity and contents not reported	Active	604-38

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TABLE 27 (continued)

CA FID UST Site	Address	Contents	Case Status	Map ID
Murphy Trucking/ Equipment	9007 Center Ave	1-capacity and contents not reported	Active	610-37
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	5-capacity and contents not reported	Active	614-40
Master Builders Inc	9060 Haven	1-capacity and contents not reported 1-500 gal. leaded fuel	Active	626-37
Klondike Corporation	10888 007 th St	1-5,000 gal. diesel fuel	Active	627-37,38
Cumberland-Swan, West Div	9817 7 th St	2-capacity and contents not reported	Active	642-36,37
Borg Manufacturing	12150 6 th	2-capacity and contents not reported	Active	654-39
Pier 1 Imports	9160 Buffalo Ave	1-capacity and contents not reported	Active	655-38
Kaiser Steel Corp	9400 Etiwanda Ave, Fontana	Not reported	Inactive	660-39
Kaiser Steel Corporation	9401 Etiwanda Ave., Fontana	1-10,000 gal. product 11-10,000 gal. empty 6-20,000 gal. empty 1-5,000 gal. empty 1-waste capacity not reported	Inactive	660-39
New Age Circuits Inc	10022 6 th	1-capacity and contents not reported	Active	687-37
Saunders System, Inc.	9366 Santa Anita Ave	1-20,000 gal. diesel 1-500 gal. waste oil	Active	689-39
Deberard Bros.	9663 006 th St	1-550 gal. leaded fuel	Active	690-36
Coca-Cola Bottling Company	Rancho Cucamonga	Not reported	Active	691-37



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TABLE 27 (continued)

CA FID UST Site	Address	Contents	Case Status	Map ID
Laird Construction Company	9460 Lucas Ranch Rd	1-500 gal. waste oil 1-12,000 gal. leaded fuel 2-12,000 gal. diesel fuel	Active	711-37
Frito-Lay Inc	9535 Archibald Ave	2-30,000 gal. contents not reported 1-2,000 gal. waste oil 1-30,000 gal. diesel fuel 1-8,000 gal. new oil 1-12,000 gal. diesel fuel 1-16,000 gal. diesel fuel 1-12,000 contents not reported	Active	713-36,37
Royal Seals A Quadion Co	9621 Lucas Ranch Rd	1-6,000 gal. regular unleaded fuel	Active	732-37
A and R Equipment	9950 4 th St	2-capacity and contents not reported	Active	754-37,42
Pic N Save Distribution Center	12434 Fourth St	2-10,000 gal. diesel fuel 1-1,000 gal. contents not reported 1-1,000 gal. waste oil	Active	762-39,44

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TABLE 28

Statewide Spills, Leaks, Investigation and Cleanup Cost Recovery Cases (SLIC)

SLIC Site	Address	Summary	Case Status	Date Closed	Map ID
Not Reported	12281 Arrow Route	Not Reported	Not Reported	NA	445-33
Tamco	12459 Arrow Hwy	Not Reported	Not Reported	NA	481-39
Vista Metals Corp	13435 Whittram Ave	Not Reported	Not Reported	NA	534-40
Lithonia-Hi-Tek Poles West,	8886 Vincent AV	Not Reported	Not Reported	NA	569-38
Sterling Can Corporation	8939 Etiwanda Ave	VOC cleanup	Active (pollution characterization)	NA	589-39

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TABLE 29**Active Underground Storage Tank Database (UST)**

UST Site	Address	Map ID
SC-Chaffey College	5885 Haven Ave	38-17
Rancho Cucamonga Fire Protection #175	11108 Banyan St	45-18
AG-Gunby, Vic	6140 Napa Ave	46-15,16
Mobil SS #18-003	10477 Lemon Ave	60-17
Verizon/Etiwanda Co	6322 East Ave	61-20
Tosco SS #31294-7304	6411 Haven Ave	67-17,24
CI-RC Fire District #1	6627 Amethyst St	87-23
Circle K #5232	6760 Carnelian St	104-23
Mobil Oil SS#11-GEB	6539 Milliken Ave	111-25
SC-Etiwanda Sch Maint Yd	6925 Etiwanda Ave	131-26
Chevron Station #94863	8687 Baseline Rd	171-23
Circle K #5216	7287 Archibald Ave	172-23,24
Mobil SS #11-914	9315 Baseline Rd	176-23
Seven-11 Store #13979	9464 Baseline Rd	188-23
Texaco Star Mart	11289 Baseline Rd	197-25
Chevron USA #9956	12576 Baseline Rd	200-26
Rancho Cucamonga Fire Dst	9612 San Bernardino Rd	281-30
Gas Garden Inc.	7996 Archibald Ave	282-30,31
Rancho San Antonio Med Ctr	7777 Milliken Ave	288-32
Vineyard Mobil	8919 Foothill Blvd	294-30
Arco Fac #9692	9888 Foothill Blvd	304-31
Deer Creek Car Wash	10340 Foothill Blvd	306-31
Texaco Food Mart	8166 Foothill Blvd	310-29
Value Gas	9524 Foothill Blvd	313-30
Arco Petroleum Prod #1721	9533 Foothill Blvd	313-30
AG-Deambrogio Vineyards	10385 Foothill Blvd	315-31
Verizon/Cucamonga Co	10428 Foothill Blvd	316-31
Texaco Star Mart #2157	11108 Foothill Blvd	318-32
Arco AM/PM	11768 Foothill Blvd	328-32
Circle K #989	12854 Foothill Blvd	333-33
Chevron Svc Stn #20-1595	12659 Foothill Blvd	337-33
Rancho Mobil	8118 Masi Dr	340-32
Heritage Hospital	10841 White Oak Ave	364-32
MWD-Etiwanda Power Plant	8248 Etiwanda Ave	367-33
Rancho Cucamonga Sprts Ct	8408 Rochester Ave	406-32
Mobil Oil Corp 11AJ6	8477 Archibald Ave	416-30,31
RF White Co Inc #2971	1401 E Arrow Hwy	418-29
Mobil Serv Sta #11-CMH	8514 Vineyard Ave	422-30

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TABLE 29 (continued)

UST Site	Address	Map ID
Arrow Car Wash	10075 Arrow Hwy	424-31
Fontana Steel Inc	12451 Arrow Hwy	446-33
Tamco	12459 Arrow Hwy	481-39
City of Rancho Cucamonga	9153 9 th St	497-36
Rancho Cucamonga Fire Station #174	11239 Jersey Blvd	532-38
Vista Metals Corp	13435 Whittram Ave	534-40
Haven Car Wash	8777 Haven Ave	549-37
GTE/Cucamonga P/Y	9000 Hellman Ave	592-36
Cardlock Fuels System Inc.	9291 Charles Smith Ave	636-38
Amphastar Parmaceuticals	11570 6 th St	655-38
I.E.U.A. Plant #4	12811 6 th St	663-39
Co-West Detention Center	9500 Etiwanda Ave	675-39
Ag-De Barard Bros	9663 6 th St	682-36
Proficient Food Company	9408 Richmond Place	703-38
Laird Construction Co Inc	9460 Lucas Ranch Rd	711-37
Recot Inc	9535 Archibald Ave	713-36,37
St-Calif Hwy Patrol	9530 Pittsburg Ave	730-38
Ryder Truck Leasing/SVCS	9608 Santa Anita Ave	741-39
Texaco Svc Stn #2248	4675 Mills Cir	767-43
Ontario Mobil	1050 Ontario Mills Dr	769-43

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TABLE 30**Historical Underground Storage Tank Registered Database (HIST UST)**

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Joe W. Masters	8552 Cherry Lane	Other	1-280 gal. diesel fuel (1970)	7-15,16
George Cherbak	9953 Hillside Rd	Ranch	1-600 gal. unleaded fuel (1950) 1-250 gal. not reported	13-17
Tolstoy Ranch	9686 Hillside Rd	Farm	1-550 gal. unleaded fuel	14-16,17
Ranch	5550 Archibald Ave	Ranch	1-300 gal. regular fuel 1-1,000 gal. regular fuel	19-16,17
Etiwanda Game Assoc.	14804 Summitt Ave	Private	1-500 gal. unleaded fuel	35-20
Chaffey Community College	5885 Haven Ave	School	1-6,000 gal. regular fuel 1-550 gal. waste oil 1-550 gal. regular fuel	38-17
Transportation Department	5885 Haven Ave	Gas Station	1-6,000 gal. waste oil (1960) 1-550 gal. waste oil (1960) 1-15,000 gal. regular fuel (1960)	38-17
Ag Casazza Christmas Tree Far	6229 East Ave	Farm	1-550 gal. regular fuel (1970)	51-20
Mobil SMI (14-003)	10477 Lemon Ave	Gas Station	1-8,000 gal. premium fuel (1981) 1-10,000 regular fuel (1981) 1-12,000 gal. unleaded fuel (1981) 1-1,000 gal. waste oil (1981)	60-17
Etiwanda Forest Fire Station	6696 Etiwanda Ave	Other	1-550 gal. unleaded fuel (1955)	101-26
Steve De Ambrogio Individual	6778 Hellman Ave	Home	1-500 gal. regular fuel (1963)	106-23
Houtz & Sons	6942 Beryl St	Egg Ranch	1-500 gal. premium fuel (1955)	133-23
Boal Electric, Inc.	7090 Archibald Ave	Other	1-1,000 gal. unleaded fuel 1-1,000 gal. unleaded fuel (1977)	142-23,24

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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
American Can, Inc.	7125 Amethyst Ave	Mfg. Plastic Bottles	1-2,000 gal. regular fuel (1974)	150-23
94863	8687 Baseline Rd	Gas Station	1-5,000 gal. not reported (1972) 2-10,000 gal. not reported (1972) 1-1,000 gal. waste (1972)	171-23
Stop-N-Go Markets (674)	7287 Archibald Ave	Convenience Store	1-10,000 gal. waste (1986) 1-10,000 gal. unleaded fuel (1986) 1-10,000 gal. premium fuel (1986) 1-10,000 diesel fuel (1986)	172-23,24
E&S Grape Growers & Shippers	12467 Baseline Rd	Farming	2-regular fuel 1-diesel fuel	174-26
Del Monte Corp	12467 Baseline	Winery	1-1,000 gal. unleaded fuel (1948) 1-1,000 gal. diesel fuel (1948)	174-26
Mobil SMI (14-914)	9315 Baseline Rd	Gas Station	1-10,000 gal. waste oil (1980) 1-8,000 gal. premium fuel (1980) 1-10,000 gal. regular fuel (1980) 1-10,000 unleaded fuel (1980)	176-23
Bennett Ind	9384 Baseline Rd	Container Mfg.	1-1,000 gal. diesel fuel 1-1,000 gal. waste	179-23
7-Eleven Store #13979	9464 Baseline Dr	Gas Station	1-10,000 gal. unleaded fuel (1968) 1-10,000 gal. regular fuel (1968) 1-10,000 gal. fuel (1982)	188-23

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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Sidney Diamond	12559 Baseline Rd	Other	1-550 gal. unleaded fuel (1975)	200-26
Hawker Construction	9805 Church St	Contractor	1-2,000 gal. diesel fuel	241-31
Central School Dist Warehouse	7957 Archibald Ave	School	1- waste, capacity not reported waste 1-1,000 gal. diesel fuel	277-30,31
Nick Devito, Inc.	7990 Haven Ave	Agriculture Farm	1-1,020 gal. unleaded fuel	278-31
Gas Garden Inc.	7996 Archibald Ave	Gas Station	1-10,000 gal. regular fuel (1977) 1-10,000 gal. unleaded fuel (1977) 2-10,000 gal. contents not reported (1977)	282-30,31
Cucamonga County Water Distric	8055 Klusman Ave	Public Utility	1-550 gal. diesel fuel (1982) 1-10,000 gal. regular fuel (1982) 1-10,000 gal. unleaded fuel (1982)	292-30
Union Oil Service Station #697	9082 Foothill Blvd	Gas Station	2-12,000 gal. unleaded fuel (1981) 1-12,000 gal. diesel fuel (1981) 1-12,000 premium fuel (1981)	303-30
Service Station	9888 Foothill Blvd	Gas Station	1-10,000 gal. unleaded fuel (1966) 1-8,000 gal. regular fuel (1966) 1-8,000 gal. premium fuel (1966) 1-550 gal. waste oil (1966)	304-31



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Kramer Bros. Nurseries, Inc.	8112 Foothill Blvd	Farming / Agricultural	1-4,000 gal. diesel fuel (1973) 1-550 gal. regular fuel 1-2,000 gal. unleaded fuel	310-29
Rod's Texaco	8166 Foothill Blvd	Gas Station	2-4,000 gal. unleaded fuel 1-6,000 gal. premium fuel 2-4,000 gal. regular fuel	310-29
90084	9511 Foothill Blvd	Gas Station	1-10,000 gal. contents not reported (1971) 1-6,000 gal. contents not reported (1961) 1-5,000 gal. contents not reported (1961) 1-2,000 gal. contents not reported (1961) 1-550 gal. waste (1961)	313-30
Nor Arco Inc	9533 Foothill Blvd	Gas Station	4-4,000 gal. contents not reported (1961) 1-10,000 gal. contents not reported (1978)	313-30
De Ambrogio Vineyards Inc	10385 Foothill Blvd	Farming Grapes	1-1,000 gal. regular fuel 1-270 gal. regular fuel	315-31
General Telephone of CA	10428 Foothill Blvd	Public Utility Company	1-10,000 gal. unleaded fuel 1-500 gal. waste oil	316-31
Circle K Store #989	12854 Foothill Blvd	Gas Station	1-9,940 gal. regular fuel 1-9,940 unleaded fuel 1-9,940 premium fuel	333-33
K Mart Enterprises	8443 Haven Ave	Auto Repair	1-500 gal. waste oil (1981)	408-31
K Mart #7529	8443 Haven Ave	Waste Oil	1-500 gal. waste	408-31



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Steelscape Incorporated	11200 Arrow Route	Coil Coating	1-3,000 gal. waste (1977) 1-5,000 gal. waste (1968)	415-32
John R. Hix (14-313)	8477 Archibald Ave	Gas Station	1-1,000 gal. waste oil (1981) 1-8,000 gal. premium fuel (1981) 1-10,000 gal. regular fuel (1981) 1-12,000 gal. unleaded fuel (1981)	416-30,31
R.F. White Co., Inc.	1401 E Arrow Hwy	Gas Station	2-10,000 gal. diesel fuel (1974 & 1980) 1-10,000 gal. regular fuel (1974) 1-10,000 gal. premium fuel (1974) 1-10,000 gal. unleaded fuel (1974) 1-5,000 gal. diesel fuel (1978)	418-29
Boyd Lbr Co.	1400 E. Arrow Hwy	Other	1-1,000 unleaded fuel (1956) 1-1,000 gal. diesel fuel (1979)	418-29
Country Wide Truck Services, In	10244 Arrow Hwy	Interstate Carrier	4-6,000 diesel fuel 1-2,000 gal. diesel fuel 1-4,000 gal. diesel fuel 1-10,000 gal. diesel fuel	428-31
Country Wide Truck Service	10244 Arrow Hwy	Interstate Carrier	1-100 gal. waste oil	428-31
Philips Industries Inc.	9141 Arrow Hwy		1-10,000 gal. diesel fuel 1-1,000 gal. regular fuel	433-30



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Schlosser Forge Company	11711 Arrow Rte	Other	4-7,500 gal. diesel fuel	440-32
Halstead Enterprises	11355 Arrow Rte	Other	1-1,000 gal. product 2-1,000 gal. waste	441-32
Trac Div Tanner Co	12167 Arrow Hwy	Construction	2-10,000 gal. diesel fuel	443-33
Tanner Company Tpac Division	12167 Arrow Hwy	Construction	1-10,000 gal. waste	443-33
DBA Brookside Vineyard Company	12281 Arrow Rte	Winery	1-500 gal. unleaded fuel	445-33
Ameron So CA Div	12455 Arrow Rte	Manufacture	2-10,000 gal. diesel fuel (1966) 1-12,000 gal. product 1-10,000 gal. diesel fuel (1980) 1-3,000 gal. unleaded fuel (1980) 1-3,000 gal. premium fuel (1980) 1-1,000 gal. product (1972) 1-550 gal. product (1972) 1-550 gal. waste oil (1972)	446-33
Big Three Industries	12550 Arrow Rte	Air Separation	1-12,000 gal. diesel fuel (1977) 1-9,950 gal. unleaded fuel; (1978) 1-waste oil (1977)	447-33
Chino Basin Water District	8555 Archibald Ave	Public Agency	1-5,000 gal. unleaded fuel	455-30,31
Chino Basin Municipal Water District	8555 Archibald Ave	Public Agency	1-5,000 gal. unleaded fuel (1981)	455-30,31



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Main Office	8555 Archibald Ave	Gas Station	1-5,000 gal. unleaded fuel (1981) 1-12,000 gal. unleaded fuel (1974) 1-9,000 gal. diesel fuel (1974)	455-30,31
Brooks Products	8585 Etiwanda Ave	Manufacturing	1-unleaded fuel capacity not reported 1-regular fuel capacity not reported	474-33,39
Tamco	12459 Arrow Hwy	Steel Mill	4-50,000 gal. diesel fuel (1975)	481-39
Amerion Steel & Wire Division	12459 Arrow Hwy	Steel Mill	1-10,000 gal. diesel fuel (1976)	481-39
Future Marine	1364 E. 9 th St	Boat Fuel	2-4,000 premium fuel (1979)	485-35
Avery Intl	9292 Ninth ST	Manufacture	16-2,000 gal. product (1966) 6-6,000 gal. product (1966) 7-10,000 gal. product (1966 & 1969) 1-20,000 gal. product (1969) 3-15,000 gal. product (1973) 2-20,000 gal. diesel fuel	489-36
Jim's Exxon	8715 Grove Ave	Gas Station	1-8,000 gal. regular fuel (1972) 2-5,000 gal. unleaded fuel 1-3,000 gal. unleaded fuel 1-280 gal. waste oil (1972)	502-35



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Albert W. Davies, Inc.	8737 Helms Ave	Contractor	1-500 gal. unleaded fuel (1978) 1-500 gal. regular fuel (1978)	507-36
Construction Yard	8801 Helms Ave	Contractor Yard	1-2,000 gal. waste (1977) 1-1,000 regular fuel (1977)	507-36
California Concrete Products, I	1337 Bowen St	Manufacturing Plant	1-1,000 gal. diesel fuel 1-280 gal. unleaded fuel 1-550 gal. regular fuel	515-35
PAC Rancho, Inc.	1100 Jersey Blvd	Foundry (steel)	1-400 gal. contents not reported	518-38
Commercial Carriers	10807 Jersey Blvd	Truck Terminal & Repair	1-500 gal waste 1-2,000 gal. diesel fuel	519-37,38
Paul Friedman	11155 Jersey Blvd	Roof Sub-Contractor	1-9,950 gal. unleaded fuel (1981) 1-15,000 gal. diesel fuel (1981) 1-9,950 gal. regular fuel (1981) 1-1,000 gal. waste oil (1981) 1-capacity and contents not reported	530-38
General Latex and Chemical Corporation	11266 Jersey Blvd	Chemical Corporation	1-8,000 gal. diesel fuel (1979) 1-1,000 gal. diesel fuel (1971)	531-38



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Socco Plastic Coating Company	11251 Jersey Blvd	Service	1-4,000 gal. unleaded fuel (1078) 1-9,970 gal. diesel fuel (1978) 2-3,000 gal. contents not reported (1978) 1-2,000 gal. contents not reported (1978) 1-3,500 gal. contents not reported (1978)	532-38
Vistas Metals Corp	13435 Whittram Ave	Aluminum Recycling	4-7,500 gal. diesel fuel (1973) 1-2,000 gal. diesel fuel 1-1,000 gal. regular fuel 1-waste oil capacity not reported	534-40
Gas Haven Chevron	8777 Haven Ave	Gas Station	1-15,000 unleaded fuel (1982) 1-15,000 premium fuel (1982) 1-15,000 regular fuel (1982)	549-37
Maintenance Yard	111 Grove Ave	Other	1-10,000 gal. unleaded fuel (1980) 1-2,000 gal. diesel fuel 1-2,000 gal. regular fuel	554-35
Simsmetal America	8822 Etiwanda Ave	Recycling	1-9,940 gal. diesel fuel (1980) 1-555 regular fuel (1972) 1-1,009 unleaded fuel (1972)	555-39
Cucamonga School Dist.	8776 Archibald Ave	School	1-1,000 gal. diesel fuel (1977) 1-2,000 unleaded fuel (1977)	556-36,37

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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Scheu Steel Supply Company	8830 Vineyard Ave	Steel Service Center	1-2,000 gal. diesel fuel 1-1,000 gal. unleaded fuel	557-36
Western Metal Decorating Company	8875 Industrial Lane	Other	2-1,000 gal. diesel fuel (1965)	566-36
Viana Tool & Machine Inc	8909 Rochester Ave	Machine Shop	1-4,000 gal. regular fuel (1979) 1-4,000 gal. unleaded fuel (1979)	570-38
Custom Alloys Casting Corp	8889 Archibald Ave	Foundry	1-2,000 gal. unleaded fuel 1-4,000 gal. unleaded fuel	571-36,37
Etiwanda Launcher Facility	8996 Etiwanda Ave	Electric Utility	1-200 gal. contents not reported (1984)	573-39
Etiwanda Generating Station	8996 Etiwanda Ave	Utility	1-550 gal. product (1952) 1-480 gal. waste (1970) 1-waste with capacity not reported 1-1,300 gal. waste (1950) 1-120 gal. product (1952) 1-6,400 gal. waste (1980) 1-550 gal. product 1-1,600,000 gal. waste 6-product with capacity not reported 1-550 gal. waste 2-500 gal. waste	573-39
Ontario Seventh-Day Adventist	1722 E 8 th St	School	1-500 gal. unleaded fuel (1963)	574-36



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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents`	Map ID
Luther A. Hayden	9567 8 th St	Other	1-10,000 gal. waste oil 1-1,000 gal. regular fuel 1-10,000 gal. diesel fuel	583-36
CHB Foods Inc Metal Deco. Div	8939 Etiwanda Ave	Litho Coating	7-10,000 gal. contents not reported (1966) 1-10,000 diesel fuel (1966)	589-39
Klondike Pacific Corp.	10888 7 th Street	Other	1-5,000 gal. waste (1984)	627-37,38
Foseco Cucamonga	7 th St off Rochester Av	Steelmill and Foundry	2-regular fuel, capacity not reported	638-38
Specialty Finishes Co.	9123 Center Ave	Paint Manufactur- ing	4-3,000 gal. contents not reported (1968)	639-37
Deberard Bros.	9663 6 th St	Farm	1-550 gal. regular fuel	682-36
Saunders System, Inc.	9366 Santa Anita Ave	Truck Maintenance Facility	1-20,000 gal. waste (1980) 1-500 gal. waste oil (1980)	689-39
Coca-Cola Bottling Company	Rancho Cucamonga	Distribution & Warehouse	1-12,000 gal. diesel fuel 1-12,000 gal. regular fuel 1-12,000 gal. unleaded fuel 1-1,000 gal. diesel fuel 1-500 gal waste oil	691-37
Laird Construction Company	9460 Lucas Ranch Rd	Construction	1-500 gal. waste oil 1-12,000 gal. regular fuel 2-12,000 gal. diesel fuel	711-37

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TABLE 30 (continued)

HIST UST Site	Address	Facility Type	UST Capacity and Contents	Map ID
Cucamonga Traffic	9535 Archibald Ave	Snack food Distributor	2-capacity and contents not reported 1-2,000 gal. waste oil (1981) 1-30,000 gal. diesel fuel (1981) 1-8,000 gal. new oil (1981) 1-12,000 gal. diesel fuel (1976) 1-16,000 gal. diesel fuel (1969) 1-12,000 gal. contents not reported (1976)	713-36,37
Royal Seals A Quadion Co	9621 Lucas Ranch Rd	Manufacturing	1-6,000 gal. unleaded fuel	732-37
East Valley Plant (Building No	10900 4 th St	Manufacturing	3-20,000 gal. diesel fuel (1974) 1-1,200 gal. waste oil (1974)	756-38,43
Pic N Save Distribution Center	12434 Fourth St	Distribution Center	2-10,000 gal. diesel fuel (1984) 1-1,000 gal. contents not reported (1984) 1-1,000 gal. waste oil (1984)	762-39,44

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TABLE 31

Above Ground Storage Tank Facilities Database (AST)

AST Site	Address	Contents	Map ID
Orange Street Plant	8731 Orange Street	10,000 gal.	64-16,23
Ameron Int'l Concrete & Steel	12455 Arrow Route	23,650 gal.	446-33
Not Reported	8810 Etiwanda Ave	1-9,000 gal.	567-39
Etiwanda Pump Station	8996 Etiwanda Avenue	1-1,739,766 gal	573-39
California Steel Industries, Inc.	14000 San Bernardino Ave., Fontana	394,594 gal.	614-40
Rancho Cucamonga Sports Center (reference provided by City)	8408 Rochester Ave.	Not Reported	Not Applicable

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TABLE 32

Statewide Environmental Evaluation and Planning System (SWEEPS UST)

The listing is no longer updated or maintained. The Sites on this list were not tabulated separately since this list is no longer maintained, however, the majority of the information from this database was included in Table 27 (CA FID UST Sites) since these databases were generally reported together.

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TABLE 33

California Hazardous Material Incident Report System (CHMIRS)

The Sites on this list were not tabulated since: these accidental releases were most likely cleaned up immediately by first responders; the majority of the incidents do not have a facility name and only include the address; and if any of the sites are active they will most likely be included in another databases.

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TABLE 34

Proposition 65 Reports (Notify 65)

Notify 65 Site	Address	Map ID
Mobil Oil Corporation 11-AJ-6	8477 Archibald	416-30,31

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TABLE 35

Voluntary Cleanup Program (VCP)

VCP Site	Address	Description	Case Status	Date Closed	Map ID
Fontana Steel, Inc	12451 Arrow Route	“No contaminants found”	No Further Action	12/22/00	446-33
TI Wire	12459 Arrow Hwy A	Recycling, scrap metal, and vehicle maintenance-hydrocarbon solvents, metals, unspecified solvent mixtures, other inorganic solid waste, lead, and cadmium compounds	No Further Action	4/23/96	481-39

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TABLE 36**Cleaner Facilities (DRYCLEANERS)**

DRYCLEANERS Site	Address	Site Status	Date Inactive	Map ID
Chaffey Cleaners	10451 Lemon St #C	Active	NA	59-17
Chaffey Plaza Cleaners	10451 Lemon Ave Ste C	Inactive	6/30/98	59-17
Charles Dunn Professionals	6331 Haven Ave	Inactive	6/30/05	62-17
College Cleaners	6331 Haven Ave #16	Inactive	6/30/98	62-17
College Cleaners	6331 Haven Ave Unit #16	Inactive	6/30/01	62-17,24
Day Creek Cleaners	12223 Highland Ave #100	Inactive	6/30/05	79-26
Vineyards Market Place	11398 Kenyon Wy Ste H	Active	NA	81-25
Jim Dandy Cleaners	6630 Carnelian St	Active	NA	86-23
Town & Country Cleaners	9762 19 th St	Inactive	6/30/05	92-24
Town & Country Cleaners	9762 19 th St	Active	NA	92-24
Rancho C Cleaners	8782 19 th St	Inactive	6/30/99	97-23
Golden Hanger Cleaners	6777 Carnelian St	Inactive	6/1/96	104-23
Family Cleaners	7208 Archibald	Inactive	6/30/00	161-23,24
Victoria Cleaners	7270 Victoria Park Ln Ste 3E	Inactive	6/30/05	165-26
Victoria Village Cleaners	7270 Victoria Park Ln	Active	NA	165-26
Victoria Village Cleaners	7270 Victoria Park Ln	Inactive	6/30/06	165-26
A 1 Dry Cleaners	8780 Baseline Rd	Active	NA	183-23
Crown Cleaners	9665 Baseline Rd	Active	NA	185-23
Tonys Cleaners	9674 Baseline	Inactive	6/30/98	185-23
Empire Cleaners	9255 Baseline Rd Unit G	Inactive	6/30/02	186-23
Harvs Cleaners	9723 Baseline Rd	Active	NA	192-23,24
Central Park Cleaners	7379 Milliken Ave Suit	Inactive	6/30/95	215-25
Billy Patrick DBA Truck Master	9663 Palo Alto St	Inactive	6/30/05	221-23,30

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TABLE 36 (continued)

DRYCLEANERS Site	Address	Site Status	Date Inactive	Map ID
Terra Vista Cleaners	7211 E Haven Ave Ste F	Inactive	6/30/02	238-31
7 Day Cleaners Inc	8005 Vineyard Ave Ste H2	Inactive	6/30/04	279-30
Outpost Cleaners	8013 Archibald	Active	NA	282- 30,31
AT Cleaners	8976 Foothill Blvd Ste BL	Inactive	1/1/95	294-30
USA Cleaners & Laundry	1475 E. Foothill Blvd	Active	NA	296-29
Lee Seung C (USA Cleaners)	1475 E. Foothill Blvd	Inactive	6/30/98	296-29
Rancho Towne Center Cleaners	9116 Foothill Blvd	Inactive	6/30/00	303-30
Bonded Cleaners	9359 Foothill Blvd	Active	NA	312-30
Peppermint Cleaners	9473 Foothill Blvd	Active	NA	313-30
Dollar Cleaners	9950 Foothill Blvd Un	Active	NA	320-31
Magnolia Village Cleaners	11849 Foothill Blvd Ste	Active	NA	327-32
Market Place Cleaners	12859 Foothill Blvd Ste B	Inactive	6/30/98	355-33
Mediflex Inc	8437 Maple Pl	Active	NA	411-32
Continental Cleaners	10074 Arrow St	Inactive	6/30/99	424-31
Power Pros Electric Co	8756 Helms Ave	Active	NA	507-36
Prime Marine	8780 Prestige Ct	Active	NA	520-38
AFV Fleet Srevice Inc	8930 Center Ave	Inactive	6/30/05	590-37
Bright Star Cleaners	9205 Archibal	Inactive	6/30/95	667- 36,37



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TABLE 37

Well Investigation Program Case List (WIP)

WIP Site	Address	File Status	Map ID
Rhino Linings	9213 Archibald Ave	Historical	657-36,37

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TABLE 38**Clandestine Drug Labs (CDL)**

CDL Site	Address	Lab Type	Map ID
Not Reported	4910 Edmonton Dr	Illegal drug lab.	2-14
Not Reported	5663 Lone Pine Dr	Illegal drug lab.	26-21
Not Reported	Corner of Turquoise / Jennet	Abandoned drug lab waste	30-15
Not Reported	6265 Callaway Pl	Illegal drug lab	52-17
Not Reported	6225 Colony Court	Illegal drug lab	53-19,20
Not Reported	6275 Archibald Ave	Illegal drug lab	54-16,17
Not Reported	12344 Wintergreen	Illegal drug lab	113-26
Not Reported	6979 Pizzoli Ct	Illegal drug lab	138-25
Not Reported	7089 Etiwanda Ave	Abandoned drug lab waste	148-26
Not Reported	7180 Pecan Avenue	Illegal drug lab	167-26,27
San Bernardino County DEHS	12158 Baseline	Illegal drug lab	170-26
Not Reported	13475 Baseline Rd	Illegal drug lab	199-27
Dianne Cox	7352 Cartilla	Illegal drug lab	209-24
Dianna Cock	7352 Cartilla Avenue	Illegal drug lab	209-24
Not Reported	9355 Palo Alto	Illegal drug lab	220-23,30
Not Reported	7489 Ivy Ln	Illegal drug lab	225-24,31
Not Reported	10062 Balsa St	Illegal drug lab	226-24,31
Not Reported	7580 Lockhaven Ave	Illegal drug lab	230-31
Not Reported	7761 Arroyo Vista	Illegal drug lab	250-30
Not Reported	9666 Hemlock	Illegal drug lab	253-30,31
Lowell Sistler	9246 Birch St	Illegal drug lab	254-30
Kenneth Wayne Aponas	7841 Spinel	Illegal drug lab	266-30
Not Reported	7903 Elm #226	Illegal drug lab	273-32
Not Reported	9356 Foothill Blvd	Illegal drug lab	312-30
Not Reported	9194 Conifer Ln	Illegal drug lab	356-30
Not Reported	13380 Chestnut Ave	Illegal drug lab	363-24
Not Reported	1411 San Bernardino Road, #K	Illegal drug lab	369-29
Not Reported	13449 Ivy St	Illegal drug lab	375-34
Not Reported	9900 Placer, Apt D	Illegal drug lab	393-31
Not Reported	8137 Arrow Highway	Illegal drug lab	420-29
Not Reported	8643 Arrow Route	Illegal drug lab	426-29,30
Not Reported	10300 Arrow Route	Illegal drug lab	429-31
Not Reported	8597 Ilex Rd	Illegal drug lab	436-34
Not Reported	13519 Arrow Blvd	Illegal drug lab	439-34
Not Reported	11998 Arrow Route	Illegal drug lab	442-33

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TABLE 38 (continued)

CDL Site	Address	Lab Type	Map ID
Not Reported	8608 Hickory Ave	Illegal drug lab	468-34,40
Not Reported	8705 London Ct	Illegal drug lab	516-37
Not Reported	1454 Chaffee, Apt 215	Illegal drug lab	548-35
Alex and Patricia Garcia	10223 24 th Street	Abandoned drug lab waste	559-37
Norman Massey, Jr.	9397 8 th Street	Illegal drug lab	581-36
Not Reported	1755 N. Madera Ave	Illegal drug lab	611-35
Not Reported	1506 Highland Ct	Illegal drug lab	615-35
Not Reported	1723 N Solano	Illegal drug lab	621-36
Not Reported	1639 Barranca Avenue	Illegal drug lab	640-36
Not Reported	9668 Milliken Ave	Abandoned drug lab waste	748-38

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TABLE 39

State Response Sites (RESPONSE)

RESPONSE Site	Address	PAST USE/ Chemical	Case Status	Date Closed	Map ID
Bredero Price Company	14000 San Bernardino Av, Fontana	Manufacturing- PCBs, PAHs,	Active	NA	614-40

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TABLE 40

Facility and Manifest Data (HAZNET)

The Sites on the HAZNET list were not tabulated due to the large number of sites. The large quantity generators are included in Table 4 and any facility with a release or spill will most likely be included in another databases. The list of HAZNET sites is included in Appendix A.

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TABLE 41

Aerometric Information Retrieval System (AIRS)

The AIRS Sites were not tabulated since air quality will be covered under the Public Health and Safety portion of the General Plan Update. The list of AIRS sites is included in Appendix A.

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TABLE 42

Registered Waste Tire Haulers (HAULERS)

HAULER Site	Address	Map ID
General Environmental Manageme	11155 Jersey Boulevard,	530-38

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TABLE 43**EnviroStor Database (ENVIROSTOR)**

ENVIROSTOR Site	Address	Chemical	Case Status	Date Closed	Map ID
West Banyon Alternative School	6012 East Ave	Agriculture Row Crops-arsenic, DDD, DDE, DDT, and lead.	No Further Action	9/22/03	40-20
Etiwanda Early Education Center	6084 Etiwanda Avenue	Agriculture Row Crops-DDE, DDT, DDD, toxaphene, dieldrin, dibutyl phthalate	No Further Action	3/4/02	44-19
Etiwanda High School Expansion	Victoria Avenue/East Av	Agriculture Row Crops	Inactive-Needs Evaluation	NA	126-27
Etiwanda Elementary School	7128-7192 Etiwanda Aven	Agriculture Row Crops-lead	Certified	7/12/02	151-26
Arbors Elementary School	Victoria Park Lane/Base	Agriculture Row Crops-arsenic, chlorodane, DDT, DDD, DDE	No Further Action	2/8/05	204-26
Miller Elementary School	13051 Miller Avenue	Motor Oil	No Further Action	3/7/06	247-33
Mulberry Early Education Center	Archibald Avenue/Arrow Route	Residential Area-chlordane, DDD, DDE, DDT and lead.	No Further Action	5/13/02	416-30,31
Fontana Steel, Inc.	12451 Arrow Route	“No contaminants found”	No Further Action	12/22/00	446-33



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TABLE 43 (continued)

ENVIROSTOR Site	Address	Chemical	Case Status	Date Closed	Map ID
Tamco	12549 Arrow Highway	Potential contaminated soil from baghouse waste: lead, cadmium, chromium VI and nickel.	No further action by EPA and DTSC. No evidence of release. Refer to San Bernardino County since it is a generator of hazardous waste.	7/21/95	447-33
Ti Wire	12459 Arrow Hwy A	Recycling, scrap metal, and vehicle maintenance-hydrocarbon solvents, metals, unspecified solvent mixtures, other inorganic solid waste, lead, and cadmium and compounds	No Further Action	4/23/96	481-39
Vista Metals Corp	13435 Whittram Ave, Fontana	Halogenated solvents, acid solution with metals, sludge-halogenated solvents, unspecified acid solution, unspecified alkaline solution, unspecified aqueous solution, alkaline solution with metals, and chromium VI	Refer: Other Agency	NA	534-40

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TABLE 43 (continued)

ENVIROSTOR Site	Address	Chemical	Case Status	Date Closed	Map ID
Nathan S Colen and Son, Inc.	8866 Vincent	Acid solution without metals. Unspecified acid solution. Unspecified aqueous solution. Unspecified oil containing waste	Refer: Other Agency	NA	569-38
Bredero Price Company	14000 San Bernardino Ave, Fontana	Manufacturing-PCBs, PAHs	Active	NA	614-40
Foseco Cucamonga	7 th St off Rochester Av	Hydrocarbon solvents. Other organic solvents. Polymeric resin waste	Refer: Other Agency	NA	638-38
Hellman Elementary School	6th Street/Hellman Avenue	Agriculture Row Crops	Inactive-Needs Evaluation	NA	679-36
Hartwell Corporation	9810 Sixth St	Halogenated solvents, acid solution with metals, acid solution without metals, sludge-degreasing, cadmium and compounds, and cyanide	Refer: RCRA	NA	680-37

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Appendix G
Noise Assessment

Noise Assessment For The
RANCHO CUCAMONGA GENERAL PLAN UPDATE
CITY OF RANCHO CUCAMONGA

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Project #500701.D
February 1, 2010

Table Of Contents

1.0 EXISTING SETTING.....	1
1.1 <i>Project Description</i>	1
1.2 <i>Background Information on Noise</i>	3
1.2.1 Noise Criteria Background	3
1.2.2 Noise Assessment Metrics.....	10
1.3 <i>Noise Criteria</i>	11
1.3.1 City of Rancho Cucamonga Noise Element	11
1.3.2 City of Rancho Cucamonga Noise Ordinance	13
1.4 <i>Existing Noise Measurements</i>	17
1.5 <i>Existing Traffic Noise Levels</i>	27
1.6 <i>Existing Aircraft Noise Levels</i>	30
1.7 <i>Existing Railroad Noise Levels</i>	30
2.0 POTENTIAL NOISE IMPACTS.....	32
2.1 <i>Noise Impact Criteria</i>	32
2.2 <i>Temporary Impacts</i>	32
2.2.1 Demolition And Construction Noise.....	32
2.3 <i>Long-Term Impacts</i>	35
2.3.1 Traffic Noise Impacts Due to the new General Plan Buildout.....	35
3.0 REFERENCES.....	44
APPENDIX	45

List of Tables

Table 1	City of Rancho Cucamonga Noise Standards.....	11
Table 2	City of Rancho Cucamonga Exterior Noise Ordinance Standards.....	15
Table 3	City of Rancho Cucamonga Residential Performance Standards.....	15
Table 4	City of Rancho Cucamonga Commercial Performance Standards	16
Table 5	City of Rancho Cucamonga Industrial Performance Standards	16
Table 6	Existing Noise Measurement Locations (dBA).....	18
Table 7	Existing Noise Measurements (dBA)	18
Table 8	Modeled Existing Roadway Traffic Noise Levels	27
Table 9	Traffic Noise CNEL Increases in 2030 (dB)	36
Table 10	Future 2030 With Project Traffic Noise Levels	40
Table A-1	Traffic Volumes Used For Noise Modeling (ADTs).....	46

Table A-2 Vehicle Mix Used For Noise Modeling (Surface Streets).....	49
Table A-3 Vehicle Mix Used For Noise Modeling (I-15 Freeway)	49
Table A-4 Vehicle Mix Used For Noise Modeling (I-210 Freeway)	49

List of Exhibits

Exhibit 1 Proposed General Plan	2
Exhibit 2 Typical A-Weighted Noise Levels.....	4
Exhibit 3 Speech Interference Levels.....	5
Exhibit 4 Causes and Prevalence of All Awakenings.....	6
Exhibit 5 FICAN Recommended Sleep Disturbance Curve.....	7
Exhibit 6 Schultz Curve.....	9
Exhibit 7 Typical Outdoor Noise Levels	12
Exhibit 8 Noise Compatibility Matrix.....	14
Exhibit 9 Measurement Site Locations.....	19
Exhibit 10 Measurement Site Locations 1 Through 8.....	20
Exhibit 11 Measurement Site Locations 9 Through 16.....	21
Exhibit 12 Measurement Site Locations 17 Through 21.....	22
Exhibit 13 Typical Construction Equipment Noise Levels	34

1.0 EXISTING SETTING

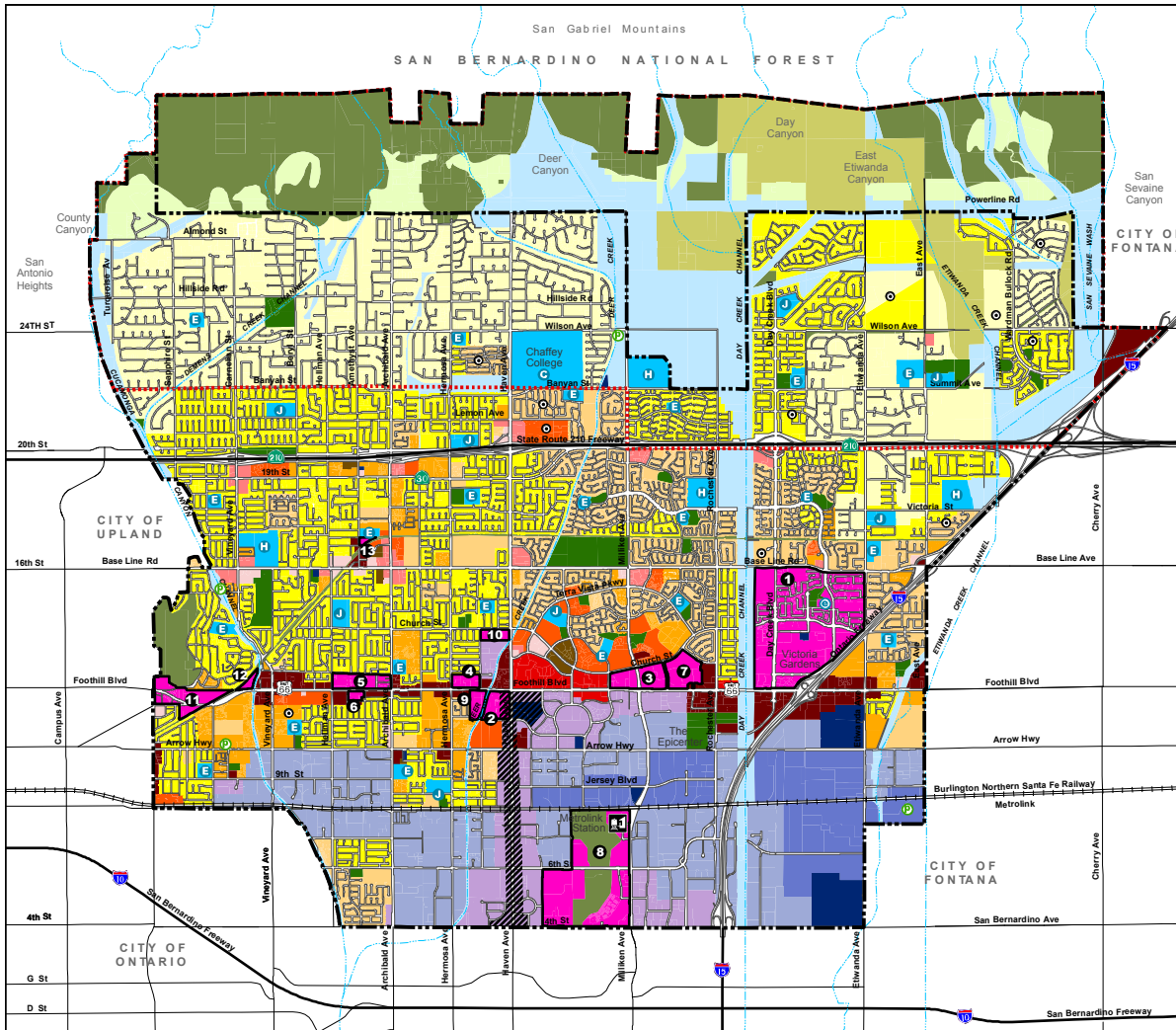
1.1 Project Description

Each city and county in California must prepare a comprehensive, long-term general plan to guide its future. California state law requires each city and county to adopt a general plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning” (California Government Code, §65300). A general plan expresses the community’s development goals and embodies public policies relative to the distribution of future land uses, both public and private. The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City.

The proposed General Plan Update will address six of the seven State-mandated General Plan elements and other issues that are important to the community. The proposed General Plan Update contains the following elements (referred to as “Chapters”):

- Managing Land Use, Community Design, and Historic Resources
- Community Mobility
- Economic Development
- Community Services
- Resource Conservation
- Public Facilities and Infrastructure
- Public Health and Safety

The City General Plan (GP) Update encompasses a total of approximately 26,551 acres. The GP Update Target Density consists of a total of 63,253 residential dwelling units (including mixed-use residential), a total of 2,430,000 square feet of school uses, 445 acres of parks, a total of 23,102,000 square feet of mixed commercial land uses, and a total of 72,000,000 square feet of mixed industrial land uses. Exhibit 1 shows the proposed land uses within the City of Rancho Cucamonga. Focused changes have been proposed to the 2001 General Plan that generated the proposed 2009 General Plan. The changes in the land uses primarily reflect the development trends in the city and mixed use along the Foothill corridor. Relative to baseline 2009 conditions the 2009 General Plan will result in 7,591 more dwelling units.



Draft General Plan (2009)

Residential

- Very Low (Less than 2 du/ac)
- Low (2 to 4 du/ac)
- Low Medium (4 to 8 du/ac)
- Medium (8 to 14 du/ac)
- Medium High (14 to 24 du/ac)
- High (24 to 30 du/ac)

Commercial

- Office (Max. 1.00 FAR)
- Neighborhood Commercial (Max 0.35 FAR)
- Community Commercial (Max. 0.35 FAR)
- General Commercial (Max. 0.35 FAR)

Mixed Use

- Mixed Use (Max. 1.00 FAR)

Industrial

- Industrial Park (Max. 0.60 FAR)
- General Industrial (Max. 0.60 FAR)
- Heavy Industrial (Max. 0.50 FAR)

Open Space

- Hillside Residential (0.1 to 2 du/ac)
- Conservation
- Open Space (0 to 0.1 du/ac)
- Flood Control/Utility Corridor

Public Facility

- Civic/Regional (Max. 1.0 FAR)
- Schools (Max. 0.20 FAR)
- Parks

Schools and Parks

- Elementary School
- Junior High School
- High School
- College
- Proposed Elementary School
- Proposed Park

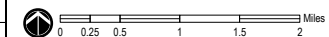
Mixed Use Areas

1. Victoria Gardens
2. Town Center at Haven and Foothill
3. Terra Vista
4. Foothill at Hermosa and Center
5. Foothill at Archibald and Hellman
6. Foothill at Helms and Hampshire
7. Foothill at Church and Mayten
8. Empire Lakes
9. Foothill at Deer Creek Channel
10. Haven and Church
11. Bear Gulch
12. Foothill at Cucamonga Channel
13. Alta Loma

- Rancho Cucamonga City Boundary
- Sphere of influence

Notes: 1. Location of proposed parks and schools are not fixed, and may be adjusted to accommodate future planning needs.

Source: Rancho Cucamonga and San Bernardino County Assessor, 2009.



August 18, 2009

Figure LU-X:
Draft Land Use Plan

RANCHO CUCAMONGA GENERAL PLAN

Exhibit 1
Proposed General Plan

1.2 Background Information on Noise

1.2.1 Noise Criteria Background

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. Exhibit 2 provides examples of various noises and their typical A-weighted noise level.

Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, temperature and humidity also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels.

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criteria is based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

Hearing Loss is generally not a concern in community noise problems, even very near a major airport or a major freeway. Environmental noise does not have an effect on hearing threshold levels particularly due to the fact that environmental noise does not approximate occupational noise exposures in heavy industry, very noisy work environments with long-term exposure, or certain very loud recreational activities such as target shooting, motorcycle, or automobile racing, etc. The Occupational Safety and Health Administration (OSHA) identifies a noise exposure limit of 90 dBA for 8 hours per day to protect from hearing loss (higher limits are allowed for shorter duration exposures). Noise levels in neighborhoods, even in very noisy neighborhoods, are not sufficiently loud to cause hearing loss.

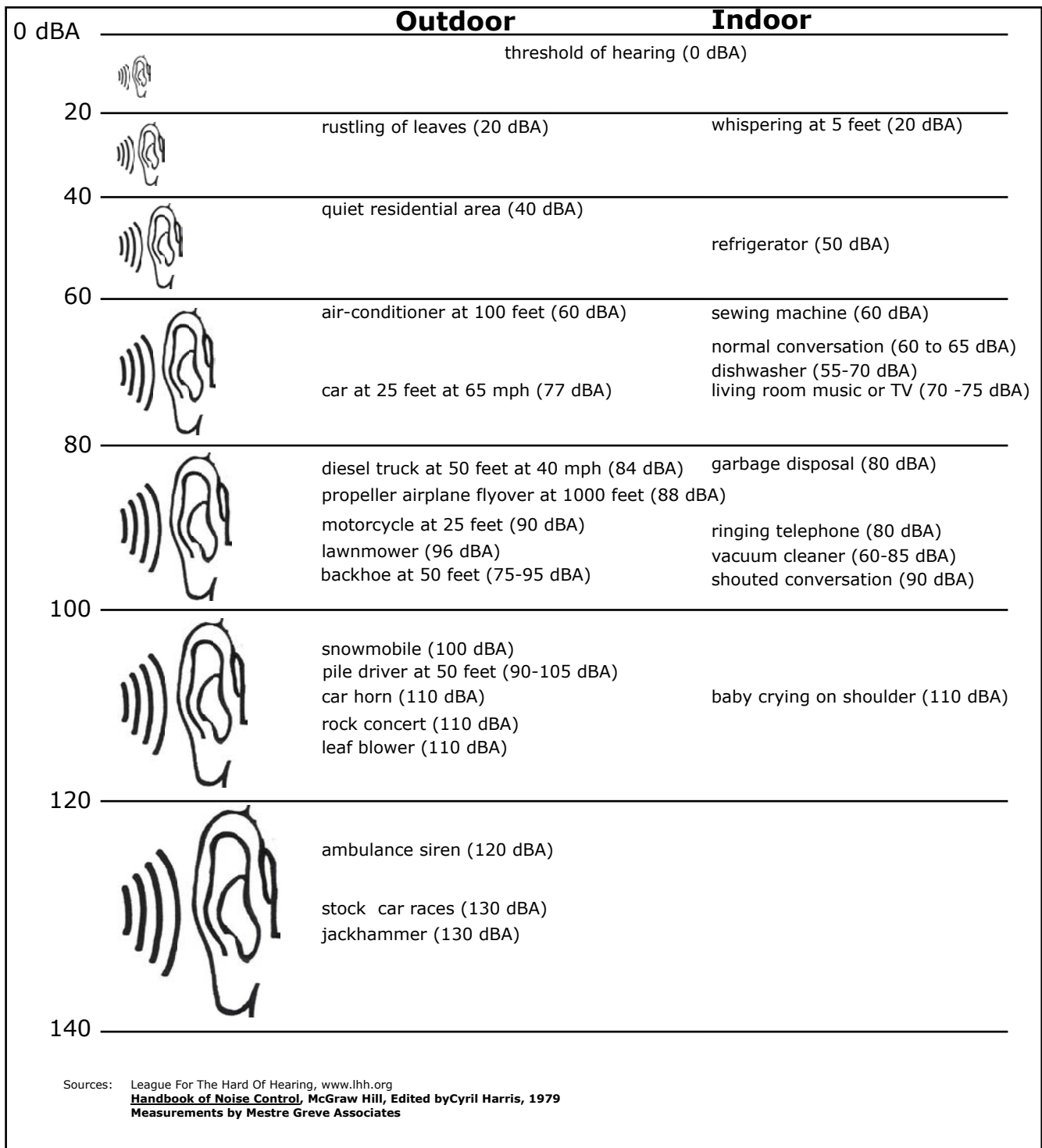


Exhibit 2

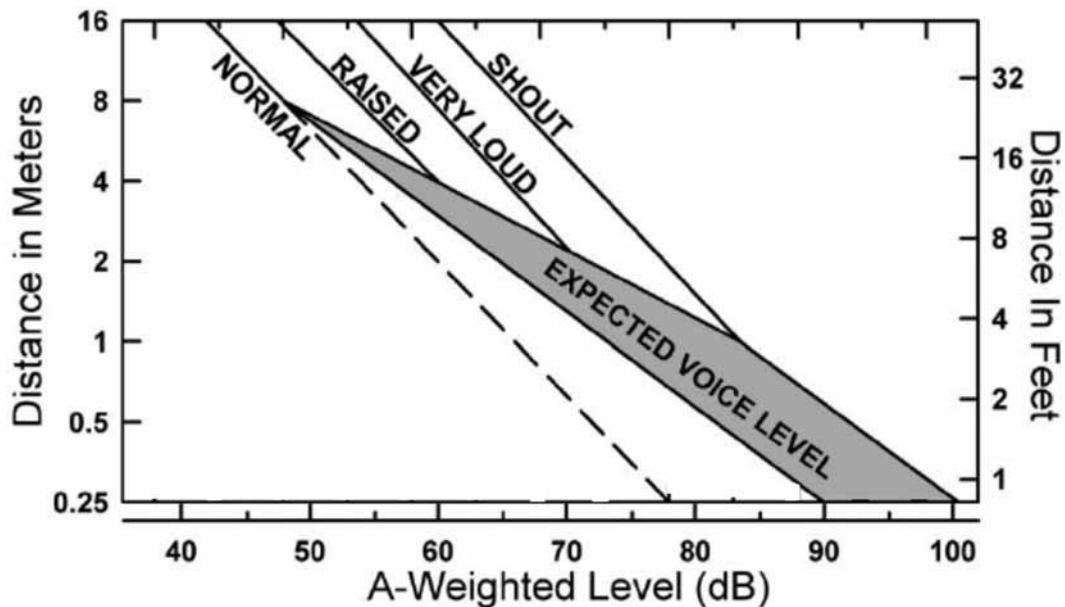
Typical A-Weighted Sound Levels

Communication Interference is one of the primary concerns in environmental noise problems. Communication interference includes speech interference and interference with activities such as watching television. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level. Exhibit 3 shows the relation of quality of speech communication with respect to various noise levels.

Sleep Interference is a major noise concern in noise assessment and, of course, is most critical during nighttime hours. Sleep disturbance is one of the major causes of annoyance due to community noise. Noise can make it difficult to fall asleep, create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages, and cause awakening. Noise may even cause awakening, which a person may or may not be able to recall.

Extensive research has been conducted on the effect of noise on sleep disturbance. Recommended values for desired sound levels in residential bedroom space range from 25 to 45 dBA with 35 to 40 dBA being the norm. Some years ago (1981), the National Association of Noise Control Officials published data on the probability of sleep disturbance with various single event noise levels. Based on older laboratory experiments conducted in the 1970s, this data indicated noise exposure at 75 dBA interior noise level event could cause noise induced awakening in 30 percent of the cases.

Exhibit 3 Speech Interference Levels

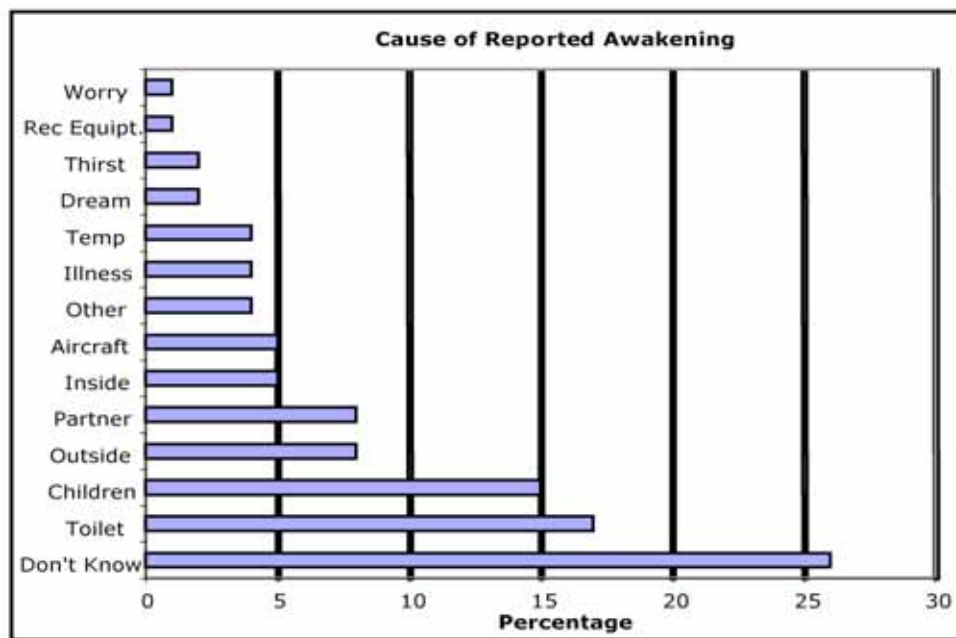


Source: U.S. EPA (1973)

However, more recent research from England has shown that the probability for sleep disturbance is less than what had been reported in earlier research. These recent field studies were conducted during the 1990s and used more sophisticated data collection techniques. These field studies indicate that awakenings can be expected at a much lower rate than had been expected based on earlier laboratory studies. This research showed that once a person was asleep, it is much more unlikely that they will be awakened by a noise. The significant difference in the recent English study is the use of actual in-home sleep disturbance patterns as opposed to laboratory data that had been the historic basis for predicting sleep disturbance. Some of this research has been criticized because it was conducted in areas where subjects had become habituated to aircraft noise. On the other hand, some of the earlier laboratory sleep studies were criticized because of the extremely small sample sizes of most laboratory studies and because the laboratory was not necessarily a representative sleep environment. The 1994 British sleep study compared the various causes of sleep disturbance using in home sleep studies. This field study assessed the effects of nighttime aircraft noise on sleep in 400 people (211 women and 189 men; 20-70 years of age; one per household) habitually living at eight sites adjacent to four U.K. airports, with different levels of night flying. The main finding was that only a minority of aircraft noise events affected sleep, and, for most subjects, that domestic and other non-aircraft factors had much greater effects. As shown in the Exhibit 4, aircraft noise was a minor contributor among a host of other factors that lead to awakening response.

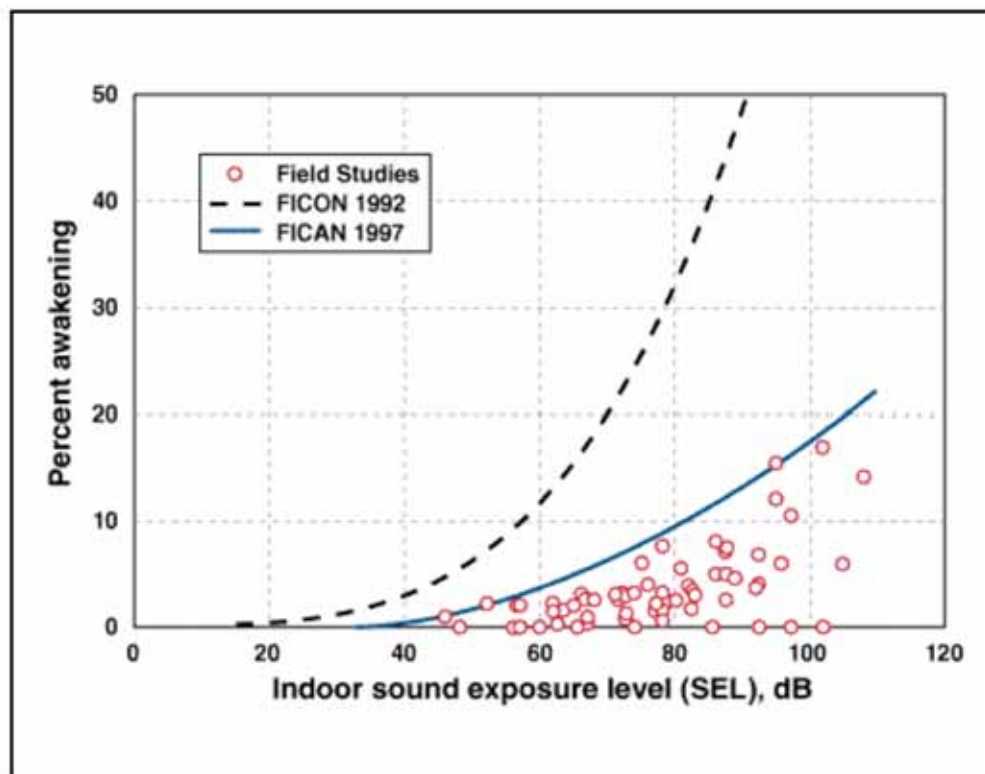
Exhibit 4 Causes and Prevalence of All Awakenings

(Total awakenings = 6,457. Each subject could have reported more than one awakening each night.)



The Federal Interagency Committee on Noise (FICON) in 1992 in a document entitled *Federal Interagency Review of Selected Airport Noise Analysis Issues* recommended an interim dose-response curve for sleep disturbance based on laboratory studies of sleep disturbance. In June of 1997, the Federal Interagency Committee on Aviation Noise (FICAN) updated the FICON recommendation with an updated curve based on the more recent in-home sleep disturbance studies which show lower rates of awakening compared to the laboratory studies. The FICAN recommended a curve based on the upper limit of the data presented and, therefore, considers the curve to represent the “maximum percent of the exposed population expected to be behaviorally awakened,” or the “maximum awakened.” The FICAN recommendation is shown on Exhibit 5. This is a very conservative approach. A more common statistical curve for the data points reflected in Exhibit 5, for example, would indicate a 10% awakening rate at a level of approximately 100 dB SEL, while the “maximum awakened” curve reflected in Exhibit 5 shows the 10% awakening rate being reached at 80 dB SEL. (The full FICAN report can be found on the internet at www.fican.org.)

Exhibit 5 FICAN Recommended Sleep Disturbance Curve



Physiological Responses are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are a sign of harm. Generally, physiological responses are a reaction to a loud short-term noise such as a rifle shot or a very loud jet over flight.

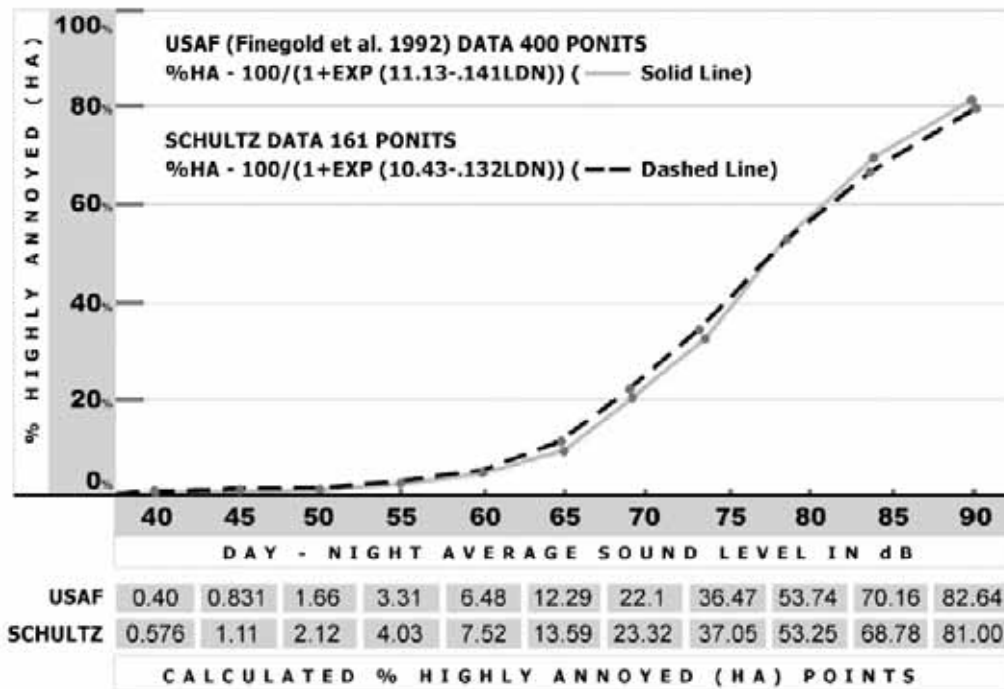
Health effects from noise have been studied around the world for nearly thirty years. Scientists have attempted to determine whether high noise levels can adversely affect human health apart from auditory damage. These research efforts have covered a broad range of potential impacts from cardiovascular response from fetal weight to mortality. While a relationship between noise and health effects seems plausible, it has yet to be convincingly demonstrated—that is, shown in a manner that can be repeated by other researchers while yielding similar results.

While annoyance and sleep/speech interference have been acknowledged, health effects, if they exist, are associated with a wide variety of other environmental stressors. Isolating the effects of aircraft noise alone as a source of long-term physiological change has proved to be nearly impossible. In a review of 30 studies conducted worldwide between 1993 and 1998 a team of international researchers concluded that, while some findings suggest that noise can affect health, improved research concepts and methods are needed to verify or discredit such a relationship. They called for more study of the numerous environmental and behavioral factors than can confound, mediate, or moderate survey findings. Until science refines the research process, a direct link between aircraft noise exposure and non-auditory health effects remains to be demonstrated. Recent studies by Eriksson (2007) and Jarup (2007 Hyena study) have reported higher rates of hypertension with increasing aircraft noise levels. The Hyena study identified the effect occurred only for nighttime aircraft noise.

Annoyance is the most difficult of all noise responses to describe. Annoyance is an individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability. The level of annoyance, of course, depends on the characteristics of the noise (i.e.; loudness, frequency, time, and duration), and how much activity interference (e.g. speech interference and sleep interference) results from the noise. However, the level of annoyance is also a function of the attitude of the receiver. Personal sensitivity to noise varies widely. It has been estimated that two to ten percent of the population is highly susceptible to annoyance from any noise not of their own making, while approximately twenty percent are unaffected by noise. Attitudes are affected by the relationship between the person and the noise source (Is it our dog barking or the neighbor's dog?). Whether we believe that someone is trying to abate the noise will also affect our level of annoyance.

There is no current research to suggest that there is a better metric than DNL (or CNEL) to relate to annoyance. See Section 1.2.2 for a discussion on noise metrics. Exhibit 6 relates DNL noise levels to community response from two of these surveys. One of the survey curves presented in Exhibit 6 is the well-known Schultz Curve. It displays the percent of a populace that can be expected to be annoyed by various DNL values for residential land use with outdoor activity areas. At 65 DNL, the Schultz Curve predicts approximately 14% of the exposed population reporting themselves to be “highly annoyed.” At 60 DNL, this decreases to approximately 8% of the population.

Exhibit 6 Schultz Curve



The Schultz Curve and recent updates include data having a very wide range of scatter with communities near some airports reporting much higher percentages of population highly annoyed at these noise exposure levels. While the precise reasons for this wide range of sensitivity is not identified, it is possible that non-acoustic factors, including political or the socio-economic status of the surveyed population, may have played an important role in increasing the sensitivity of this community during the period of the survey. Annoyance levels have never been correlated statistically to single event noise exposure levels in airport related studies.

School Classroom Effects. Interference with classroom activities and learning due to aircraft noise is an important consideration and has been the subject of much recent research. Studies from around the world indicate that vehicular traffic, railroad, and aircraft noise can have adverse effects on reading ability, concentration, motivation, and long-term learning retention. A complicating factor in this research is the extent of background noise from within the classroom itself. The studies indicating the most adverse effects examine cumulative noise levels equivalent to 65 DNL or higher and single event maximum noise levels ranging from 85 to 95 dBA. In other studies, the level of noise is unstated or ambiguous. According to these studies, a variety of adverse school room effects can be expected from interior noise levels equal to or exceeding 65 DNL and or 85 dBA SEL.

Some interference with classroom activities can be expected with noise events that interfere with speech. As discussed in other sections of this report, speech interference begins at 65 dBA, which is the level of normal conversation. Typical construction attenuates outdoor noise by 20 dBA with windows closed and 12 dBA with windows

open. Thus some interference of classroom activities can be expected at outdoor levels of 75 to 85 dBA. These levels are included in the Time Above analysis performed as part of this study. No studies have been identified where observations of student activity were compared to aircraft noise levels during aircraft flyovers. There is a clear need for additional research on the effects of aviation noise on schools and these studies need to include in classroom noise measurements and observation of student responses to aircraft activity.

1.2.2 Noise Assessment Metrics

The description, analysis and reporting of community noise levels around communities is made difficult by the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these metrics attempts to quantify noise levels with respect to community response. Most of the metrics use the A-Weighted noise level to quantify noise impacts on humans. A-Weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Noise metrics can be divided into two categories: single event and cumulative. Single-event metrics describe the noise levels from an individual event such as an aircraft fly over or perhaps a heavy equipment pass-by. Cumulative metrics average the total noise over a specific time period, which is typically 1 or 24 hours for community noise problems. For this type of analysis, cumulative noise metrics will be used.

Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on man, (2) the variety of noises found in the environment, (3) the variations in noise levels that occur as a person moves through the environment, and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. Two of the predominant noise scales are the Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the “energy” average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1 hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL). It is the energy sum of all the events and background noise levels that occur during that time period.

CNEL, Community Noise Equivalent Level, is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized for occurring at these times. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These

time periods and penalties were selected to reflect increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a “CNEL of 60 dBA”, “60 dBA CNEL”, or simply “60 CNEL”. Typical noise levels in terms of the CNEL scale for different types of communities are presented in Exhibit 7.

Ldn (or DNL), the day-night scale is similar to the CNEL scale. The only difference between Ldn and CNEL is that evening noises are not penalized for the Ldn metric.

L(%) is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example since 5 minutes is 25% of 20 minutes, L(25) (or L25) is the noise level that is equal to or exceeded for five minutes in a twenty-minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example most daytime County, state and City Noise Ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words, the Noise Ordinance states that no noise level should exceed 55 dBA for more that fifty percent of a given period.

1.3 Noise Criteria

1.3.1 City of Rancho Cucamonga Noise Element

The City of Rancho Cucamonga Noise Element of the General Plan specifies outdoor noise level limits for land uses impacted by transportation noise sources. Generally the City requires that new developments be designed to achieve these standards. Unlike most cities that use a 24-hour noise scale, such as CNEL, the City uses a separate noise limit for daytime and nighttime periods. The Noise Element states that for residential land use, the noise standard for residential exterior areas is 60 dBA from 7 a.m. to 10 p.m. and 55 dBA from 10 p.m. to 7 a.m. The noise standard for residential interior areas is 45 dBA from 7 a.m. to 10 p.m. and 40 dBA from 10 p.m. to 7 a.m. The City’s noise standards are specified in Table 1.

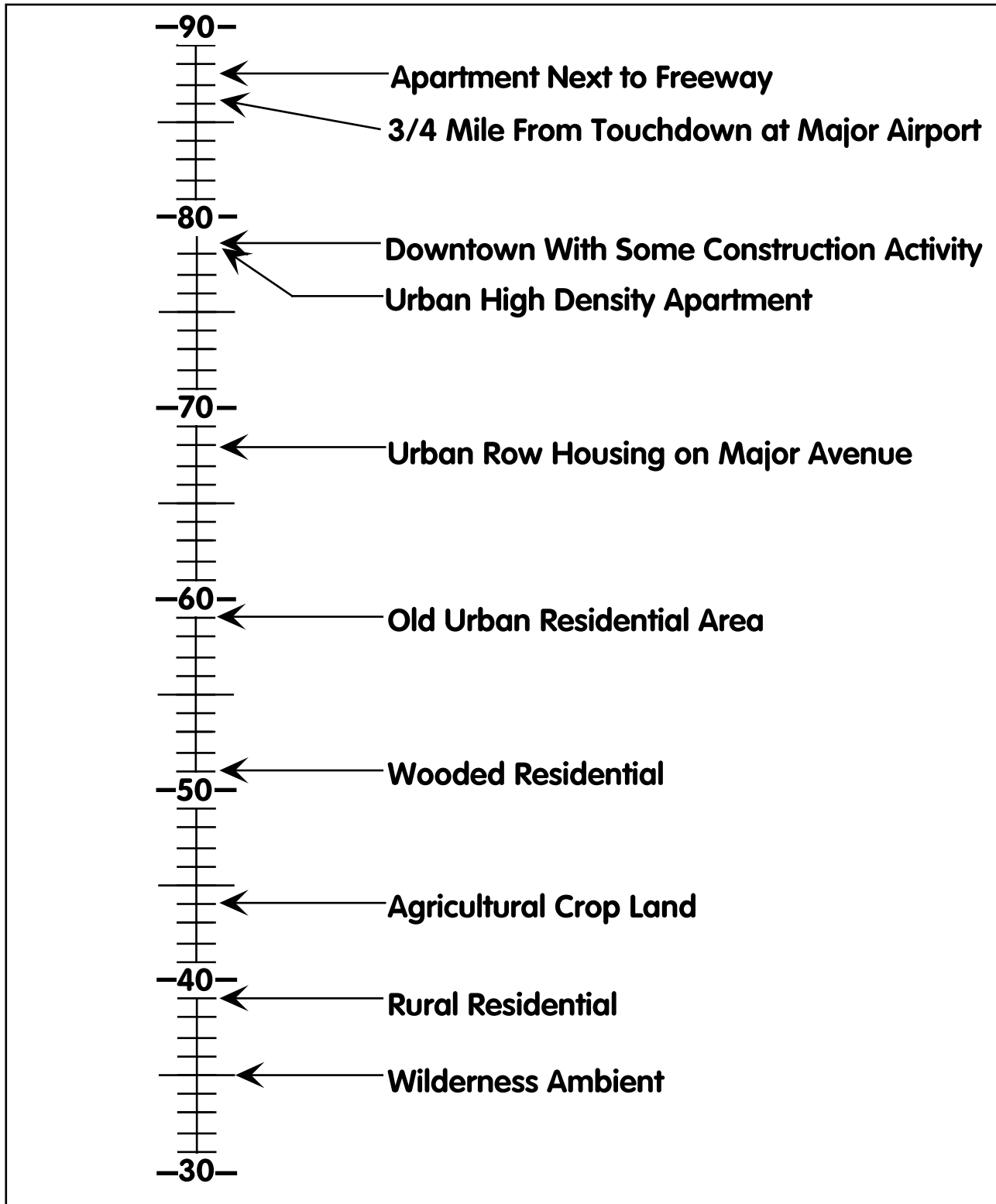
Table 1 City of Rancho Cucamonga Noise Standards
LAND USE NOISE STANDARDS

<i>Land Use</i>	<i>Interior Standard</i>	<i>Exterior Standard</i>
Residential		
10 pm to 7 am	40 dBA	55 dBA
7 am to 10 pm	45 dBA	60 dBA
Commercial/Office		
10 pm to 7 am	None identified	60 dBA
7 am to 10 pm	None identified	65 dBA
Industrial		
Class A (industrial park)	60 Ldn	65 Ldn
Class B (general industrial)	65 Ldn	75 Ldn
Class C (heavy industrial)	65 Ldn	85 Ldn

dBA = Decibel

Ldn = Day-night average sound level

CNEL Outdoor Location



Source: U.S. Environmental Protection Agency, "Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure," EPA Report NTID 73.4, 1973.

The noise standard specified in Table 1 is currently under review by the City and is subject to change according to the following implementation measure, which is being proposed.

Comprehensively review the noise standards contained in the Development Code, including noise performance standards related to each land use district. Revise as appropriate to reflect the general noise/land use compatibility guidelines in the Public Health and Safety Chapter, other community noise control objectives, and accepted best practices. Based on the revised noise standards, utilize noise technical studies and recommended mitigation measures prepared for development proposals to address potential noise impacts or conflicts with existing noise-sensitive uses, including but not limited to residences, schools, parks, private/public open spaces (e.g., plazas, outdoor dining areas, patios, and courtyards), health care facilities, religious institutions, commercial and industrial employee areas (e.g., break rooms), and other similar uses.

The implementation measure recommends using the land use compatibility guide. That guide, also known as the Noise Compatibility Matrix, is specified by figure PS-8 of the Public Health and Safety Chapter of the General Plan. That figure has been replicated and is shown in Exhibit 8. The guidelines specified by Exhibit 8 will be used instead of the standard specified in Table 1.

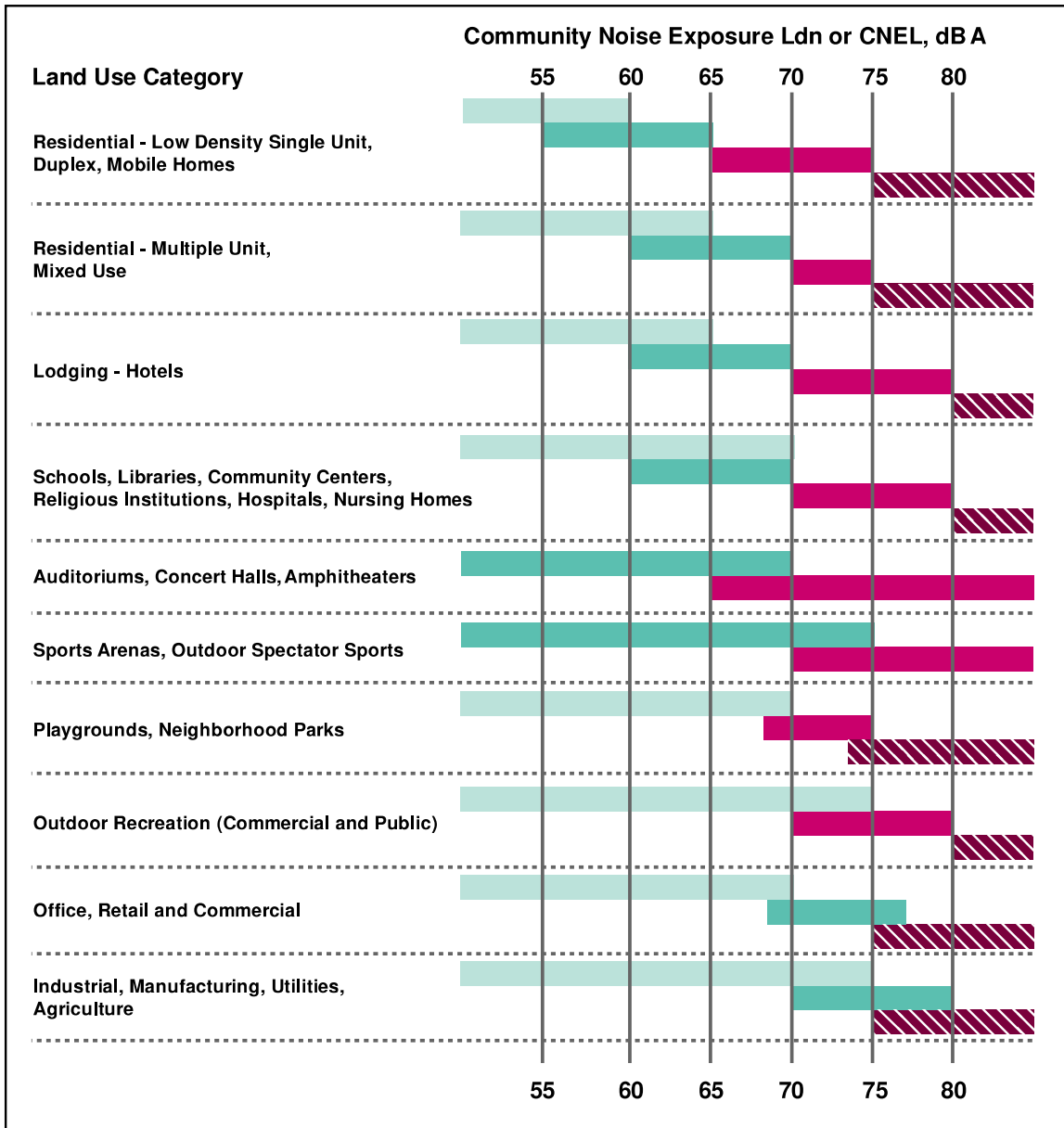
It should be noted that the guidelines presented in Exhibit 8 represent categories of compatibility and not specific noise standards. The implementation measure presented above will result in the City developing specific standards that are based on the compatibility matrix. These exterior noise standards typically apply to outdoor areas where people congregate. In the case of residences, the standards would apply to private yards of single-family homes and patios for multi-family homes. For hotels and motels, the standards would apply to recreational areas. For hospitals, the applicable areas would be patios, and for parks, the applicable areas would be picnic areas. For schools, the applicable areas would be playgrounds. Historically, the City has been using 65 CNEL as a standard for new residential development. That is, for new residential developments the project would need to incorporate features (e.g., setbacks, soundwalls, etc.) to insure that noise sensitive areas such as private backyard and patio areas achieve a 65 CNEL standard.

1.3.2 City of Rancho Cucamonga Noise Ordinance

A noise ordinance is designed to control unnecessary, excessive and annoying sounds from stationary (non-transportation) noise sources. Noise ordinance requirements cannot be applied to mobile noise sources such as heavy trucks when traveling on public roadways. Federal and state laws preempt control of mobile noise sources on public roads. Noise ordinance standards typically apply to industrial and commercial noise sources impacting residential areas. They are also applicable to noise generated at parks and schools impacting residential areas. The City of Rancho Cucamonga's municipal code prohibits the production of excessive noise, and will be applied to this project to determine potential noise impacts.

General Residential and Commercial Exterior Noise Standards

Section 17.02.120 of the City of Rancho Cucamonga's municipal code sets limits on the exterior noise levels that will be tolerated. Noise ordinance limits are specified using the "Basic Noise Level" as its reference criteria. The Basic Noise Level varies by land use and is presented later in Table 3, Table 4, and Table 5. The municipal code defines the Basic Noise Level as "the acceptable noise level within a given district". The City's exterior noise standard puts restrictions on the duration of noises of various magnitudes.



Normally Acceptable
Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable
New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: Figure PS-8, Chapter 8, Public Health and Safety, Rancho Cucamonga General Plan

The noise ordinance sets the following time limits on noise sources in all residential and commercial districts. All of these restrictions apply to each noise source.

- a. Basic Noise Level for a cumulative period of not more than 15 minutes in any one hour; or
- b. Basic Noise Level plus 5 dBA for a cumulative period of not more than 10 minutes in any one hour; or
- c. Basic Noise Level plus 14 dBA for a cumulative period of not more than 5 minutes in any one hour; or
- d. Basic Noise level plus 15 dBA at any time.

Restrictions a,b,c, and d are summarized in Table 2 in terms of L%, and the maximum duration in any given hour. If the noise source is impulsive or simple tone, the noise standard for each of the L% categories is 5 dBA less than what it is for noise sources that are neither impulsive nor pure tone.

Table 2 City of Rancho Cucamonga Exterior Noise Ordinance Standards

	L25	L16.7	L8.3	Lmax
Noise Level Limit*	BNL	BNL+5 dBA	BNL+14 dBA	BNL+15 dBA
Noise Level Limit (impulse or pure tone)	BNL- 5 dBA	BNL	BNL+9 dBA	BNL+10 dBA
Maximum allowable time in any 1-hour period that the noise level can exceed the noise level limit	15 minutes	10 minutes	5 minutes	Never Allowed

BNL=Basic Noise Level (dBA)

* Noise is neither impulsive nor pure tone

L25, L16.7, and L8.3 represent L% values. See Section 1.2.2 for the definition of L%

The noise ordinance exempts certain activities from the standard. These activities include City or school approved activities that take place between 7 a.m. and 10 p.m., outdoor gatherings with a temporary use permit granted by the City, mechanical warning devices that operate within any hour no longer than 30 minutes after they start, and construction activities that abide by the restrictions as specified in the construction noise paragraph (see below).

Residential Noise Standards

The City has adopted performance standards that are applicable in residential districts. Those standards are shown in Table 3.

Table 3 City of Rancho Cucamonga Residential Performance Standards

Location of Measurement	Maximum Allowable	
	10 p.m. to 7 a.m.	7 a.m. to 10 p.m.
1. Exterior	55 dBA	60 dBA
2. Interior*	40 dBA	45 dBA

Source: Municipal Code Chapter 17.08.080

* Fully enclosed interior with windows and doors shut

The City provides exemptions to the standard for emergency vehicles. Temporary construction activities that occur between the hours of 6:30 a.m. and 8:00 p.m., except Sundays and national holidays are also exempt provided that all other required conditions are satisfied (see construction noise standards).

Office and Commercial Noise Standards

The City has adopted standards that are applicable in office and commercial districts. Table 4 shows the maximum allowable exterior noise levels that can be generated by commercial and office activities.

Table 4 City of Rancho Cucamonga Commercial Performance Standards

	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
Lmax (Exterior)	65 dBA	60 dBA

Source: Compiled from information in the Municipal Code, Chapter 17.10.050

In addition to the maximum noise levels tolerated by the City, the ordinance also requires that loading and unloading that occurs between 10 p.m. and 7 a.m. not cause a noise disturbance in residential areas.

Industrial Noise Standards

The City has adopted noise standards that are applicable to industrial districts. The ordinance categorizes industrial districts into three categories. Classes A, B and C represent the industrial park, general industrial, and heavy industrial categories respectively. Table 5 shows the maximum noise levels that are tolerable in each of the three industrial districts.

Table 5 City of Rancho Cucamonga Industrial Performance Standards

	Class A (Industrial Park)	Class B (General Industrial)	Class C (Heavy Industrial)
Lmax (Exterior)	65 Ldn	75 Ldn	85 Ldn
Lmax (Interior)	60 Ldn*	65 Ldn*	65 Ldn ¹

Source: Compiled from information in the Municipal Code, Chapter 17.30.050

* Structure occupied by more than one use

1. Where use is within 200 feet of a residential zone

Construction Noise Standards

Under item 4 of Special Provisions paragraph Chapter 17.02.120 of the municipal code, noise generated by construction activities are allowed only if construction takes place between 6:30 a.m. and 8:00 p.m. on weekdays or Saturdays. Noise from construction will never be allowed on Sundays or national holidays. In addition to these time-of-day and day-of-week restrictions, construction will only be allowed if the construction noise levels also conform to all conditions specified by the general standards (see above) and Table 2, where the basic noise level that is applied to Table 2 is 65 dBA. This means that all construction noise has to be such that its L25 is less than 65 dBA, its L16.7 is less than 70 dBA, its L8.3 is less than 79 dBA, and its Lmax is less than 80 dBA in order for there to be no construction noise impacts.

Property Maintenance Noise Standards

Under item 6 of the Special Provisions paragraph, Chapter 17.02.120 of the municipal code, noise that results from the maintenance of real property is permitted, provided the activities take place between the hours of 8 a.m. and 8 p.m. on any day except Sunday or between the hours of 9 a.m. and 8 p.m. on Sunday.

Animal Noise Standards

Chapter 6.02.0.40 of the municipal code sets limits on animals that habitually make noise. The ordinance puts restriction on animals from allowing them to “make any other loud noise in such a manner as to at any time, day or night, cause general annoyance or discomfort to a neighboring inhabitant.”

1.4 Existing Noise Measurements

Noise measurements were taken to record the actual existing noise levels (as opposed to the modeled existing noise levels) at various locations throughout the city. The noise measurements represent a snapshot of the current noise conditions within the city. The reason a sampling of existing noise levels is needed is provide a baseline noise level from which to measure subsequent changes to the sound environment that will results from project and non-project related changes. With a recorded set of baseline measurements, changes to the noise level at these selected places within the city can then be determined when future noise measurements are then taken. The noise measurements are not used in the noise modeling, so no comparisons will be made between measured and modeled noise levels.

A noise measurement survey of the City was conducted to determine the location of a set of noise measurement sites that would provide a noise profile of the area in the vicinity of the project site. Several criteria were used in the site selection process including, but not limited to, the proximity of a measurement site to sensitive land uses as well as its proximity to significant noise generators. Several of the significant noise generators within the City were the Interstate 210 Freeway, the Interstate 15 Freeway, as well as Base Line Road, and Foothill Boulevard. This was due to a very high volume of automobile and truck traffic at these locations. To provide noise measurement coverage of the area, measurement sites were chosen within the confines of the City and its sphere of influence. After the site selection process was over, a series of short-term noise measurements were taken at the chosen sites.

Twenty-one short-term noise measurements were taken. All twenty-one measurement sites were within the City and its sphere of influence. All twenty-one of the short-term measurements were taken over a three-day period from July 7 to July 9th of 2009. The measurement site locations are enumerated in Table 6 and the measurement data is contained in Table 7. The measurement sites are displayed in Exhibit 9.

All noise measurements in Table 7 report average noise levels in terms of the Leq metric, however some noise standards and other analysis in this document report noise levels in terms of the CNEL noise scale. In order to compute either the CNEL for a noise measurement, at least 24 hours worth of noise data has to be available.

Table 6 Existing Noise Measurement Locations (dBA)

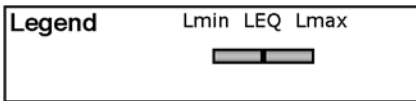
Site	Location
1	Inside apartment complex, central location, adjacent to the I-15 freeway
2	Colonial Drive and Bungalow Way, on sidewalk, adjacent to I-15 Freeway
3	Mueller Court and Dicarolo Place, on sidewalk, adjacent to I-210 Freeway
4	Near end of walking path, off of Silver Sun, adjacent to I-210 Freeway
5	Ring Avenue, north tip of cul-de-sac, on sidewalk, next to I-210 Freeway
6	Beryl Park, west of tennis courts, at edge of soccer field, next to I-210 Freeway
7	Fennel Road, end of cul-de-sac, near Base Line Road
8	Redhill Community Park, (Base Line and Vineyard), north of shuffle board area
9	North side of Humbolt Avenue, near cul-de-sac, on dirt
10	Glenaire Ct, end of cul-de-sac, near complex entrance on Golden Oak
11	On sidewalk inside complex, between Lion and Hellman, on Foothill
12	Intersection of Hillside and Buckthorn Ave, on grass at north-east side
13	Between sidewalks in complex, near Haven Ave, about 390 feet north of Lemon
14	On school ground, next to Archibald, near playground.
15	In park, near intersection of Santa Ynez Pl and Hickcox Ln, on playground pad
16	On walking trail, west side of Etiwanda Ave, between Victoria and Carnesi
17	Walking path, Church St, between Ralph M Lewis Park and Jamboree complex
18	Genova Rd, end of cul-de-sac, between cul-de-sac and Milliken Ave.
19	On sidewalk, in complex near entrance from Archibald, south of Monte Vista
20	Intersection of Carnelian St and Somerset Dr, north-east corner, on sidewalk
21	On school ground, next to Palo Alto, at bus entrance, near Center and Palo Alto

Table 7 Existing Noise Measurements (dBA)

Site	Date	Time	Leq	Lmax	Lmin	L8.3	L50	L90
1	7-7-09	11:48	67.9	73.7	59.1	70.5	67.	63.5
2	7-7-09	11:04	66.2	73.7	61.7	67.5	65.5	63.5
3	7-7-09	9:44	62.2	77.0	57.0	63.0	61.0	59.5
4	7-7-09	14:51	72.3	78.4	66.4	73.5	72.0	70.0
5	7-8-09	8:22	56.6	72.6	51.2	58.0	55.5	53.5
6	7-8-09	11:24	60.0	64.2	56.4	61.5	59.5	58.0
7	7-7-09	12:32	53.0	68.8	40.0	56.5	49.5	44.5
8	7-8-09	14:09	57.5	72.7	45.8	60.5	55.0	49.5
9	7-9-09	12:15	67.8	93.2	46.1	62.0	58.5	54.0
10	7-9-09	13:01	52.9	71.0	42.7	56.0	50.0	46.0
11	7-9-09	10:47	60.8	73.8	46.4	64.5	58.5	52.5
12	7-8-09	13:16	64.3	89.0	39.0	65.5	48.0	41.0
13	7-8-09	9:02	56.9	76.5	44.3	60.5	54.0	48.0
14	7-9-09	11:33	69.7	84.3	52.2	72.5	68.0	60.0
15	7-7-09	8:52	48.9	64.0	43.2	51.5	46.0	44.0
16	7-7-09	10:24	53.1	68.8	38.6	58.0	43.0	40.0
17	7-7-09	13:20	60.7	69.8	45.6	65.0	58.5	51.0
18	7-7-09	14:13	65.9	79.4	43.4	70.5	61.5	51.0
19	7-8-09	9:48	59.1	70.6	41.8	62.5	57.0	48.5
20	7-8-09	12:38	68.7	84.1	47.2	72.5	66.0	55.5
21	7-8-09	10:34	47.9	64.5	38.2	50.5	41.5	40.0

Exhibits 10, 11 and 12 show the results of the noise monitoring.

Site	Location	Date	Time	Land Use	Sound Level (dBA)	Noise Sources
1	Apartment Complex on Etiwanda Avenue	7/7	11:48 a.m.	multifamily residential		freeway traffic
2	Intersection of Bungalow & Colonial, parallel to freeway	7/7	11:04 a.m.	single-family residential		freeway traffic
3	Intersection of Decarlo Pl and Mueller Ct	7/7	9:44 a.m.	single family residential		freeway traffic
4	End of walking path at end of Silver Sun	7/7	2:51 p.m.	single family residential		freeway traffic
5	North edge of cal-de-sac at end of Ring Avenue	7/8	8:22 a.m.	single family residential		barking dog was loudest; other freeway traffic
6	West of tennis courts, edge of soccer field, next to freeway	7/8	11:24 a.m.	park space		Trucks were loudest, other freeway traffic
7	North tip of cal-de-sac on Fennel Road, near Base Line	7/7	12:32 p.m.	single family residential		traffic
8	Park adjacent to Base Line	7/8	2:09 p.m.	park space		truck was loudest; other traffic



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City of Rancho Cucamonga Noise Element
Mestre Greve Associates

Exhibit 10
Measurement Site Locations
1 Through 8

Site	Location	Date	Time	Land Use	Sound Level (dBA)	Noise Sources
9	On Humbolt, near cul-de-sac, adjacent to railroad	7/9	12:15 p.m.	single family residential		commuter train was loudest; other traffic
10	End of cul-de-sac, near gate at entrance of complex	7/9	1:01 p.m.	single family residential		traffic (at gate)
11	Inside apartment complex along Foothill Blvd	7/9	10:47 a.m.	multi-family residential		traffic on Foothill
12	At Intersection of Hillside and Buckthorn	7/8	1:16 p.m.	single family residential		Motorcycle was loudest; other traffic
13	Inside apartment complex along Haven	7/8	9:02 a.m.	multi-family residential		Trucks were loudest; other traffic
14	School ground adjacent to Archibald	7/9	11:33 a.m.	school		Motorcycle was loudest; other traffic
15	In Park, End of Hickox Ln	7/7	8:52 a.m.	park space		Lawn trimmer was loudest; other traffic
16	On walking path near Etiwanda	7/7	10:24 a.m.	single family residential		School bus was loudest; other traffic



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Exhibit 11
Measurement Site Locations
9 Through 16

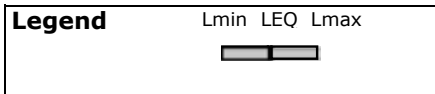
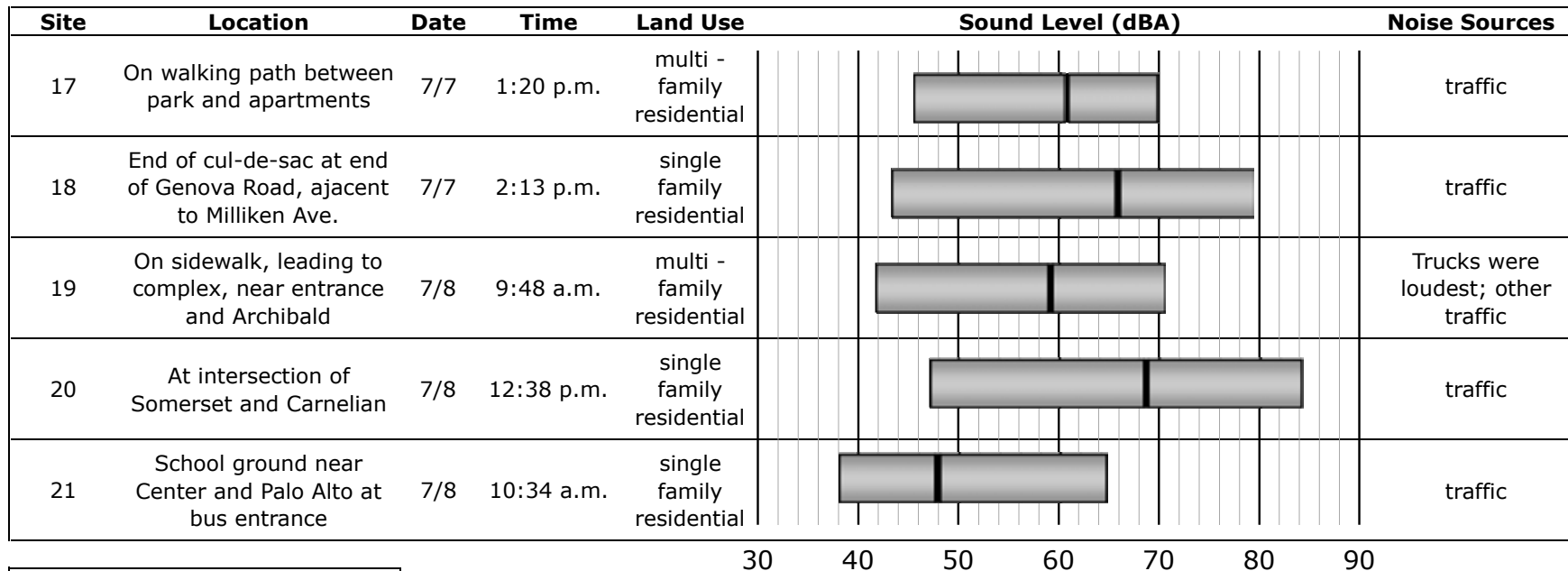


Exhibit 12
Measurement Site Locations
17 Through 21

The duration of each of the noise measurements are all less than 24 hours. As a general rule-of-thumb, a representative daytime Leq noise measurement is roughly equivalent to the CNEL level experienced at that site.

Site 1: Inside complex, central location, on grassy knoll, adjacent to the I-15 freeway

Site 1 is located on a grassy knoll at a central location of a condominium complex, adjacent to the Interstate 15 Freeway. The complex entrance is located off of Etiwanda Avenue, just south of Garcia Drive. A heavy flow of freeway traffic was observed at this location. During the measurement period, several large trucks passed by. The Lmax was 73.7 dBA, which was due to a very high volume of truck traffic. The Leq at this site measured 67.9 dBA.

Site 2: Intersection of Colonial Drive and Bungalow Way, on sidewalk, adjacent to I-15 Freeway

Site 2 is located on the sidewalk at the southwest corner of Colonial Drive and Bungalow Way. A sound wall was observed the freeway. This sound wall was approximately 15 feet in height. During the measurement period, several trucks, and motorcycles were heard traveling on the freeway. Local traffic from was minimal, and was insignificant next to the freeway traffic. The Lmax was 73.7 dBA. This was due to a loud motorcycle traveling on one of the southbound lanes of the freeway. The Leq at this site measured 66.2 dBA.

Site 3: Intersection of Mueller Court and Dicarolo Place, on sidewalk near southwest corner, adjacent to I-210 Freeway

Site 3 is located on the sidewalk, near the southwest corner of the intersection of Mueller Court and Dicarolo Place. The noise measurement was taken approximately 60 feet from the sound wall running adjacent to the freeway. The sound wall was approximately 8 feet in height. A constant flow of freeway traffic was observed. Many large vehicles passed along the freeway during the measurement period. Dogs and birds also contributed to the noise levels at this site. The Lmax was 77.0 dBA. This was due to a dog barking in a backyard very close to the measurement site. The Leq was measured at 62.2 dBA.

Site 4: Near end of walking path, very close to the Interstate 210 Freeway, leading off of the cul-de-sac at Silver Sun

Site 4 is located at a grassy area that is just off of a sidewalk of a short walking trail, very near to the Interstate 210 Freeway. The entrance to this walking path leads off from the cul-de-sac of Silver Sun. A constant, heavy flow of automobiles, trucks, and other vehicles could be heard at this location. A passing motorcycle accounted for the Lmax, which was 78.4 dBA. The Leq at this site measured 72.3 dBA. According to the data collected, this site was by far the loudest of all the measurement locations. The Lmin was 66.4 dBA.

Site 5: On Ring Avenue, at the north tip of the cul-de-sac, on a sidewalk, about 225 feet from the centerline of the Interstate 210 Freeway

Site 5 is located at Ring Avenue, on the sidewalk at the north tip of the cul-de-sac. The measurement was taken approximately 225 feet from the centerline of the freeway. A large sound wall ran adjacent to the freeway. Another smaller masonry wall lined the edge of the properties at the end of Ring Avenue. Freeway traffic was not extreme at this location due to the sound wall and the masonry wall at the properties edge. Local traffic on Ring Avenue was

minimal. An occasional high-altitude aircraft flyover could be heard. A nearby barking dog accounted for the Lmax, which was 72.6 dBA. The Leq at this site measured 56.6 dBA.

Site 6: At Beryl Park, west of the tennis courts, at the southeast edge of soccer field, next to I-210 Freeway

Site 6 is located at Beryl Park, adjacent to the Interstate 210 Freeway. The measurement was taken at the southeast edge of the soccer field, just west of the tennis courts. The meter was approximately 225 feet from the centerline of the freeway. A large sound wall ran adjacent to the freeway. The wall was approximately 16 feet in height. Freeway traffic was the most predominate noise source at this location. A truck traveling on the westbound lanes of the freeway accounted for the Lmax, which was 64.2 dBA. The Leq at this site measured 60.0 dBA.

Site 7: On Fennel Road, north end of the cul-de-sac, near Base Line Road

Site 7 is located on Fennel Road at the north end of the cul-de-sac, near Base Line Road. Local traffic on Base Line Road was the most significant noise source at this location. Aircraft flyovers could be heard at this location. A helicopter flew overhead about 5 minutes into the measurement. Traffic on Base Line Road accounted for the Lmax, which was 68.8 dBA. The Leq at this site measured 53.0 dBA.

Site 8: At Redhill Community Park, (Base Line and Vineyard), on the grass north of shuffleboard area

Site 8 is located in Redhill Community Park. The noise meter was located on the grass, just north of the shuffleboard area, and close to Base Line Road. There were many noise impacts at this location. Kids could be heard playing within the playground at the park, which about 190 feet from the measurement site. A skateboarder could be heard for a short time during the measurement period. Local traffic on Base Line Road accounted for most of the noise. The Lmax was 72.7 dBA, and was due to a truck traveling east bound on Base Line. The Leq was 57.5 dBA.

Site 9: On north side of Humbolt Avenue, near cul-de-sac, on dirt near the sidewalk

Site 9 is located on the north side of Humbolt Avenue. The noise measurement was performed on a strip of dirt adjacent to the sidewalk and the street. This site was close to the intersection of Hermosa Avenue and 8th Street. The Atchison, Topeka, and Santa Fe Railroad runs parallel between 8th Street and Humbolt Avenue. Local traffic was minimal. If it were not for an occasional train at this location, noise levels would have been nominal. Both the Lmax and the Leq were driven by train noise. The Lmax was 93.2 dBA. The Leq was 67.8 dBA.

Site 10: On Glenaire Ct, at the end of the cul-de-sac, near the entrance to the complex, which is on Golden Oak

Site 10 is located on Glenaire Court, at the eastern end of the cul-de-sac. The end of the cul-de-sac is located close to the entrance to the single-family complex. The entrance is located off of East 4th Street. Occasional aircraft noise could be heard from the LA/Ontario International Airport, which is south of the site. The majority of noise at this location was due to local traffic entering and exiting the single-family housing complex. An unusually loud car was responsible for the Lmax, which was 71.0 dBA. The Leq was 52.9 dBA.

Site 11: On the sidewalk inside the apartment complex, between Lion and Hellman, on Foothill

Site 11 is located inside an apartment complex on Foothill Boulevard. The complex is located at the southwest corner of Foothill Boulevard and Hellman Avenue. The noise measurement site was located about one-half of the way between Hellman Avenue and Lion Street (or the entrance to this complex). The noise meter was about 80 feet from the centerline of Foothill Boulevard. Adjacent to the sidewalk on Foothill was a 5-foot masonry fence topped with a wrought iron fence. There was a difference of about 5 feet between the street and the pad elevations. Many noise impacts were present. There were aircraft flyovers, a helicopter flyover, and the sound of gardening equipment. Care was taken to try to pause out the noise of the gardening equipment. The majority of noise at the site was due to traffic on Foothill Boulevard, despite the above-mentioned noise impacts. The Lmax was 73.8 dBA, and was due to a loud car with a failing muffler. The Leq was 60.8 dBA.

Site 12: At the intersection of Hillside and Buckthorn Ave, on the grass at northeast corner

Site 12 is located on Buckthorn Avenue, on an area of grass at the northeast corner of Hillside Road and Buckthorn Avenue. The site is also directly north of Heritage Community Park. The majority of noise impacts at this site were due to local traffic, much of which turned off of Hillside onto Buckthorn. A passing motorcycle was responsible for the Lmax, which was 89.0 dBA. The Leq was 64.3 dBA.

Site 13: Inside apartment complex, between sidewalks, near Haven Avenue, about 390 feet north of Lemon Avenue

Site 13 is located inside an apartment complex, on a grassy area between two sidewalks, about 110 feet from the centerline of Haven Avenue. The apartment complex is located at the northwest corner of Haven Avenue and Lemon Avenue. Much of the noise at this location was due to local traffic. The Lmax was 76.5 dBA, and was due to a large truck passing in the southbound lane of Haven Avenue. The Leq was 56.9 dBA.

Site 14: On Archibald, at edge of school ground, near fenced playground

Site 14 is located along side Archibald Avenue, on the school ground and in front of the playground. The noise meter was located on the east side of Archibald Avenue, approximately 300 feet north of Pine Crest Place. Road construction was taking place just south of the location on Archibald. The sound of jackhammering could be heard during the noise measurement period. Every attempt was made to pause out this noise when traffic noise from Archibald was not present. The Atchison, Topeka, and Santa Fe Railroad line is also south of the site, and an occasional train horn could be heard during the measurement. The most significant noise source was from traffic on Archibald. The Lmax was 84.3 dBA, and was due to a passing motorcycle in the northbound lane of Archibald. The Leq was 69.7 dBA.

Site 15: In a park, near the intersection of Santa Ynez Place and Hickcox Lane, on the easternmost playground equipment pad

Site 15 is located inside a park located at the intersection of Santa Ynez Place and Hickcox Lane. The noise meter was placed on one of three playground equipment pads, which was the easternmost of the three. During the measurement, high altitude aircraft flyovers were noted. Gardening equipment was also heard, and an attempt was made to pause out as much of the

unwanted gardening noise as possible. Despite this effort, a lawn edge trimmer was responsible for an Lmax of 64.0 dBA. The Leq was 48.9 dBA.

Site 16: On a walking trail, leading off of the west side of Etiwanda Avenue, between Victoria Street and Carnesi Drive

Site 16 is located on a walking path, the entrance of which is off of Etiwanda Avenue. The walking path is about half way between Victoria Street and Carnesi Drive, on the west side of the street. The noise meter was located on the path, about 70 feet from the centerline of Etiwanda. Local traffic from Etiwanda was the dominant noise source at this site. The Lmax was 68.8 dBA, and was due to a school bus passing on Etiwanda. The Leq was 53.1 dBA.

Site 17: On a walking path at the west edge of Ralph M Lewis Park, near the Jamboree complex

Site 17 is located on a walking path, at the west side of Ralph M. Lewis Park, off of Church Street. The noise meter was located about 70 feet from the centerline of Church Street, and about 35 feet from the entrance to the Jamboree Apartment and Townhomes complex. Local traffic from Church Street was the most significant noise source at this site. The Lmax was 69.8 dBA, and was due to local traffic on Church Street. The Leq was 60.7 dBA.

Site 18: On Genova Rd, at the cul-de-sac, on the sidewalk between the cul-de-sac and Milliken Ave

Site 18 is located on a sidewalk, which is between the cul-de-sac of Genova Road and Milliken Avenue. The measurement site is also near to the intersection of Milliken Avenue and Fairmont Way. Local traffic on Milliken was the most significant noise source at the site. The Lmax was 79.4 dBA, and was due to local traffic in general. The Leq was 65.9 dBA.

Site 19: On a sidewalk, near entrance from Archibald, inside an apartment complex, south of Monte Vista Street

Site 19 is located on a sidewalk, south of the main entrance to an apartment complex, which is located on Archibald Avenue, just south of Monte Vista Street. The noise monitor was positioned about 90 feet from the centerline of Archibald Avenue. Local traffic on Archibald Avenue was the significant noise source at this location. The Lmax was 70.6 dBA, and was due to a large truck passing by on the southbound lane of Archibald. The Leq was 59.1 dBA.

Site 20: On the sidewalk, at the Intersection of Carnelian St and Somerset Dr, on the northeast corner

Site 20 is located on a sidewalk, at the northeast corner of the intersection of Carnelian Street and Somerset Drive. Traffic noise was significant at this site. There was also a large crack in the road running from Somerset Drive to the west side of Carnelian. This crack generated quite a bit of tire noise. The Lmax was 84.1 dBA, and was due to a loud pickup truck traveling on the northbound lane of Carnelian Street. The Leq was 68.7 dBA.

Site 21: On Palo Alto Street, in the school ground, at bus entrance, and near the intersection of Center Avenue and Palo Alto Street

Site 21 is located on a grassy area on the school grounds, near the school bus entrance. This site is also located close to the intersection of Center Avenue and Palo Alto Street. A leaf blower

could be heard at a distant location, during portions of the noise measurement period. Local traffic was minimal. The Lmax was 64.5 dBA, and was due to a pickup truck passing along the eastbound lane of Palo Alto Street. The Leq was 47.9 dBA. The Lmin at this site was 38.2 dBA. This site was by far the quietest of all twenty-one sites.

1.5 Existing Traffic Noise Levels

The highway noise levels projected in this report were computed using the Highway Noise Model published by the Federal Highway Administration (“FHWA Highway Traffic Noise Prediction Model,” FHWA-RD-77-108, December, 1978). The FHWA Model uses traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute the “equivalent noise level.” A computer code has been written which computes equivalent noise levels for each of the time periods used in the calculation of CNEL. Weighting these noise levels and summing them results in the CNEL for the traffic projections used. CNEL contours are found by iterating over many distances until the distances to the 55, 60, 65, and 70 CNEL contours are found. For the roadway analysis, worst-case assumptions about future motor vehicle traffic and noise levels have been made and were incorporated in the modeling effort. Specifically, no reductions in motor vehicle noise have been assumed in spite of legislation requiring quieter vehicles at the time of manufacture.

Traffic volumes and estimated speeds were used with the FHWA Model to estimate the noise levels in terms of CNEL. Soft site conditions were assumed. Existing traffic volumes for arterials utilized were obtained from the traffic study prepared by Kunzman Associates Inc. The distances to the CNEL contours for the roadways in the vicinity of the project site are given in Table 8. These numbers represent the distance from the centerline of the road to the contour value shown. Note that the values given in Table 8 do not take into account the effect of any noise barriers or topography that may affect ambient noise levels. Table 8 shows the major noise corridors occur along Vineyard Avenue, Haven Avenue, and Milliken Avenue. Other lesser noise corridors within the boundaries of the City are also included in the table.

Table 8 Modeled Existing Roadway Traffic Noise Levels

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
19th Street					
City Border To Carnelian Street	67.8	715	332	154	71
Carnelian Street To Hellman Avenue	68.3	767	356	165	77
Hellman Avenue To Archibald Avenue	68.1	751	348	162	75
Archibald Avenue To Hermosa Avenue	67.7	698	324	150	70
Base Line Road					
City Border To Carnelian Street	69.4	910	422	196	91
Carnelian Street To Hellman Avenue	69.4	915	425	197	92
Hellman Avenue To Archibald Avenue	69.9	987	458	213	99
Archibald Avenue To Hermosa Avenue	69.6	939	436	202	94
Hermosa Avenue To Haven Avenue	70.3	1,049	487	226	105

Table 8 Modeled Existing Roadway Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Base Line Road					
Haven Avenue To Spruce Avenue	70.5	1,072	498	231	107
Spruce Avenue To Milliken Avenue	71.2	1,200	557	259	120
Milliken Avenue To Rochester Avenue	70.6	1,102	512	237	110
Victoria Park Lane To Etiwanda Avenue	70.4	1,071	497	231	107
Etiwanda Avenue To East Avenue	70.9	1,144	531	247	114
East Avenue To Americana Way	72.5	1,470	682	317	147
Americana Way To Cherry Avenue	71.7	1,291	599	278	129
Foothill Boulevard					
Campus Avenue To Grove Avenue	71.2	1,195	555	257	120
Grove Avenue To Baker Avenue	72.1	1,386	643	299	139
Baker Avenue To Vineyard Avenue	72.0	1,360	631	293	136
Vineyard Avenue To Hellman Avenue	71.6	1,282	595	276	128
Hellman Avenue To Archibald Avenue	71.9	1,342	623	289	134
Archibald Avenue To Hermosa Avenue	71.6	1,279	593	275	128
Hermosa Avenue To Haven Avenue	71.2	1,198	556	258	120
Haven Avenue To Spruce Avenue	72.3	1,427	662	307	143
Spruce Avenue To Milliken Avenue	72.5	1,458	677	314	146
Milliken Avenue To Rochester Avenue	73.6	1,744	809	376	174
Day Creek Boulevard To I-15 Freeway	75.1	2,198	1,020	473	220
I-15 Freeway To Etiwanda Avenue	72.3	1,415	657	305	142
Etiwanda Avenue To East Avenue	72.1	1,389	645	299	139
Arrow Route					
Campus Avenue To Grove Avenue	64.5	431	200	93	43
Grove Avenue To Baker Avenue	67.9	723	335	156	72
Baker Avenue To Vineyard Avenue	68.9	851	395	183	85
Vineyard Avenue To Hellman Avenue	69.1	869	404	187	87
Hellman Avenue To Archibald Avenue	69.5	920	427	198	92
Archibald Avenue To Hermosa Avenue	71.4	1,239	575	267	124
Hermosa Avenue To Haven Avenue	71.6	1,288	598	277	129
Haven Avenue To Milliken Avenue	71.5	1,266	588	273	127
Milliken Avenue To Rochester Avenue	71.0	1,163	540	251	116
Rochester Avenue To Etiwanda Avenue	71.0	1,167	542	251	117
Etiwanda Avenue To East Avenue	69.3	900	418	194	90
4th Street					
Hellman Avenue To Archibald Avenue	69.4	917	426	198	92
Archibald Avenue To Hermosa Avenue	69.3	900	418	194	90
Haven Avenue To Milliken Avenue	72.5	1,459	677	314	146
Milliken Avenue To I-15 Freeway	72.6	1,496	694	322	150
Grove Avenue					
14 th Street To Foothill Boulevard	63.0	341	159	74	34
Foothill Boulevard To Arrow Route	67.9	726	337	156	73
Arrow Route To 8 th Street	68.1	746	346	161	75
Vineyard Avenue/Carnelian Street					
Lemmon Avenue To SR-210 Freeway	70.2	1,035	481	223	104
SR-210 Freeway To 19 th Street	71.3	1,223	568	264	122
19 th Street To Base Line Road	71.6	1,285	596	277	128

Table 8 Modeled Existing Roadway Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Vineyard Avenue/Carnelian Street					
Base Line Road To Red Hill Country Club Drive	70.9	1,141	530	246	114
Red Hill Country Club Drive To Foothill Boulevard	72.2	1,412	655	304	141
Foothill Boulevard To Arrow Route	71.1	1,189	552	256	119
Arrow Route To 8 th Street	70.8	1,138	528	245	114
Archibald Avenue					
Lemmon Avenue To SR-210 Freeway	68.5	790	367	170	79
SR-210 Freeway To 19 th Street	71.2	1,211	562	261	121
19 th Street To Base Line Road	70.2	1,028	477	222	103
Base Line Road To Church Street	70.6	1,102	511	237	110
Church Street To Foothill Boulevard	70.5	1,085	504	234	109
Foothill Boulevard To Arrow Route	71.1	1,179	547	254	118
Arrow Route To 8 th Street	71.6	1,282	595	276	128
6 th Street To 4 th Street	71.9	1,342	623	289	134
4 th Street To Inland Empire Boulevard	71.6	1,269	589	273	127
Haven Avenue					
Lemmon Avenue To SR-210 Freeway	73.4	1,694	786	365	169
SR-210 Freeway To 19 th Street	72.2	1,412	655	304	141
19 th Street To Base Line Road	73.4	1,694	786	365	169
Base Line Road To Church Street	72.7	1,506	699	324	151
Church Street To Foothill Boulevard	72.7	1,522	707	328	152
Foothill Boulevard To Arrow Route	72.8	1,549	719	334	155
Arrow Route To 8 th Street	73.3	1,648	765	355	165
Milliken Avenue					
Banyan Street To SR-210 Freeway	69.5	926	430	199	93
SR-210 Freeway To Victoria Park Lane	72.7	1,506	699	324	151
Victoria Park Lane To Base Line Road	72.6	1,499	696	323	150
Base Line Road To Terra Vista Parkway	72.3	1,419	659	306	142
Terra Vista Parkway To Foothill Boulevard	72.3	1,433	665	309	143
Foothill Boulevard To Arrow Route	73.2	1,641	762	354	164
Arrow Route To 6 th Street	73.7	1,753	814	378	175
6 th Street To 4 th Street	73.8	1,798	835	387	180
4 th Street To Inland Empire Boulevard	72.9	1,573	730	339	157
Rochester Avenue					
Foothill Boulevard To Arrow Route	70.0	998	463	215	100
Arrow Route To 6 th Street	69.3	891	414	192	89
Day Creek Boulevard					
Banyan Street To SR-210 Freeway	69.5	928	431	200	93
SR-210 Freeway To Highland Avenue	71.9	1,339	621	288	134
Etiwanda Avenue					
Victoria Street To Base Line Road	65.1	468	217	101	47
Base Line Road To Miller Avenue	68.0	731	339	157	73
Miller Avenue To Foothill Boulevard	68.1	747	347	161	75
Foothill Boulevard To Arrow Route	70.2	1,024	475	221	102
Arrow Route To City Boundary	70.3	1,052	488	227	105

Table 8 Modeled Existing Roadway Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
East Avenue					
Victoria Street To Base Line Road	65.6	507	236	109	51
Base Line Road To Miller Avenue	65.6	512	238	110	51
Americana Way					
North of Base Line Road	59.6	203	94	44	20
South of Base Line Road	61.5	272	126	59	27
Beach Avenue					
Cherry Avenue To I-15 Freeway	67.8	711	330	153	71
I-15 Freeway To SR-210 Freeway	68.1	742	344	160	74
I-15 Freeway					
Wilson Avenue To I-210 Freeway	78.0	3,425	1,590	738	342
I-210 Freeway To Base Line Road	78.8	3,838	1,781	827	384
Base Line Road To Foothill Boulevard	79.3	4,154	1,928	895	415
Foothill Boulevard To Arrow Route	80.6	5,099	2,367	1,099	510
Arrow Route To San Bernardino Avenue	80.1	4,712	2,187	1,015	471
I-210 Freeway					
City Border To Carnelian Street	80.6	5,106	2,370	1,100	511
Carnelian Street To Archibald Avenue	80.4	4,950	2,297	1,066	495
Archibald Avenue To Haven Avenue	80.4	4,947	2,296	1,066	495
Haven Avenue To Milliken Avenue	80.0	4,677	2,171	1,008	468
Milliken Avenue To Day Creek Boulevard	80.0	4,653	2,160	1,002	465
Day Creek Boulevard To I-15 Freeway	79.7	4,423	2,053	953	442

† From roadway centerline

RW – Noise contour falls within roadway right-of-way.

1.6 Existing Aircraft Noise Levels

The closest major airport to Rancho Cucamonga is the LA/Ontario International Airport (ONT), which is located to the south of the City. At its closest distance, the LA/Ontario International Airport is only one mile from the Rancho Cucamonga's southern border. According to the latest noise contour (4th Quarter 2007 at Los Angeles World Airports), the City of Rancho Cucamonga is well outside the LA/Ontario International Airport's 65 dBA CNEL noise contour. Aircraft noise does not significantly impact the City of Rancho Cucamonga.

1.7 Existing Railroad Noise Levels

The Alameda Corridor East is the main east/west rail line passing through San Bernardino County. The rail line serves about 140 trains per day. The Alameda Corridor East does not pass through the City of Rancho Cucamonga. The Alameda Corridor East lies about 4400 feet south of the City of Rancho Cucamonga's southern border. The modeled train noise impact to the City of Rancho Cucamonga from the Alameda Corridor is estimated to be less than 65 CNEL.

Metrolink and BNSF trains also pass through the City of Rancho Cucamonga via two railroad tracks that are parallel and adjacent to 8th Street. Metrolink trains run on one of the tracks, and

BNSF trains run on the other track. Currently, there are a total of 38 Metrolink trains that pass through the City of Rancho Cucamonga on a daily basis. The majority of the scheduled train operations occur during the daytime hours (7 a.m to 7 p.m.) with less than one third of the total daily operations occurring during the evening and nighttime periods. It is estimated that roughly 2 BNSF freight trains run during daytime hours. The noise level near the railroad tracks depends upon a number of train-related factors, with the absence or presence of train horn noise being one such factor. Trains blow their horns when approaching railroad crossings, so at a given constant distance away from the railroad tracks, those portions along the railroad track that are near railroad crossings tend to be louder than other portions of the railroad tracks that are in far away from railroad crossings. The modeled existing CNEL noise level due to both Metrolink and BNSF operations at those portions along the railroad tracks near railroad crossings can be as high as 81.6 dBA at 50 feet from the center of the two tracks. At other portions along the railroad track away from the railroad crossings, it is estimated that the CNEL noise level is as low as 67.1 dBA at 50 feet from the tracks.

2.0 POTENTIAL NOISE IMPACTS

Potential noise impacts are commonly divided into two groups: temporary and long term. Temporary impacts are usually associated with noise generated by construction activities. Long-term impacts are those that occur after development is completed.

2.1 Noise Impact Criteria

Both short-term and long-term noise operational impacts are measured against the Noise Ordinance criteria discussed in Section 1.3.2. Construction activities for the proposed project and any noise-generating activities associated with the operation of the project will be required to meet the Noise Ordinance standards. Inability to comply with the restrictions in the Noise Ordinance and GP Noise/Land Use Compatibility standards would result in a significant impact.

Long-term impacts from traffic noise are measured against two criteria. Both criteria must be met for a significant impact to be identified. First, traffic must cause a substantial noise level increase (greater than 3 dB) on a roadway segment adjacent to a noise sensitive land use. Second the resulting future with noise level must exceed the criteria level for the noise sensitive land use. In this case, the criteria level is 65 CNEL for residential land uses.

In community noise assessment, changes in noise levels greater than 3 dB are often identified as significant, while changes less than 1 dB will not be discernible to local residents. In the range of 1 to 3 dB, residents who are very sensitive to noise may perceive a slight change. Note that there is no scientific evidence is available to support the use of 3 dB as the significance threshold. In laboratory testing situations, humans are able to detect noise level changes of slightly less than 1 dB. In a community noise situation, however, noise exposures are over a long time period, and changes in noise levels occur over years, rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely to be some value greater than 1 dB, and 3 dB appears to be appropriate for most people. This analysis has gone further and has also identified any noise increases of 1 dB or greater as being potentially significant when they impact a sensitive land uses such as residential areas.

2.2 Temporary Impacts

2.2.1 Demolition And Construction Noise

Over the long term, the General Plan will facilitate the completion of various construction projects at numerous places throughout the City. These projects can occur in any zoned area, including residential, commercial/office, industrial and mixed-use area. At this stage it is unknown when and where specific construction may occur, and therefore, potential impacts can only be addressed in a generic manner.

Construction activity generates noise that has a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and

portable generators, can reach high levels and have the potential to impact nearby sensitive land uses.

Every construction project that is planned within the City would be subject to rules of the noise ordinance. The construction noise impacts to a particular neighborhood are dependent upon a number of factors specific to the project. Some of the factors include proximity to sensitive land use, time of day, intervening barriers, level of construction (i.e. number and type of construction equipment that is operating simultaneously), and the duration of the project's construction phase.

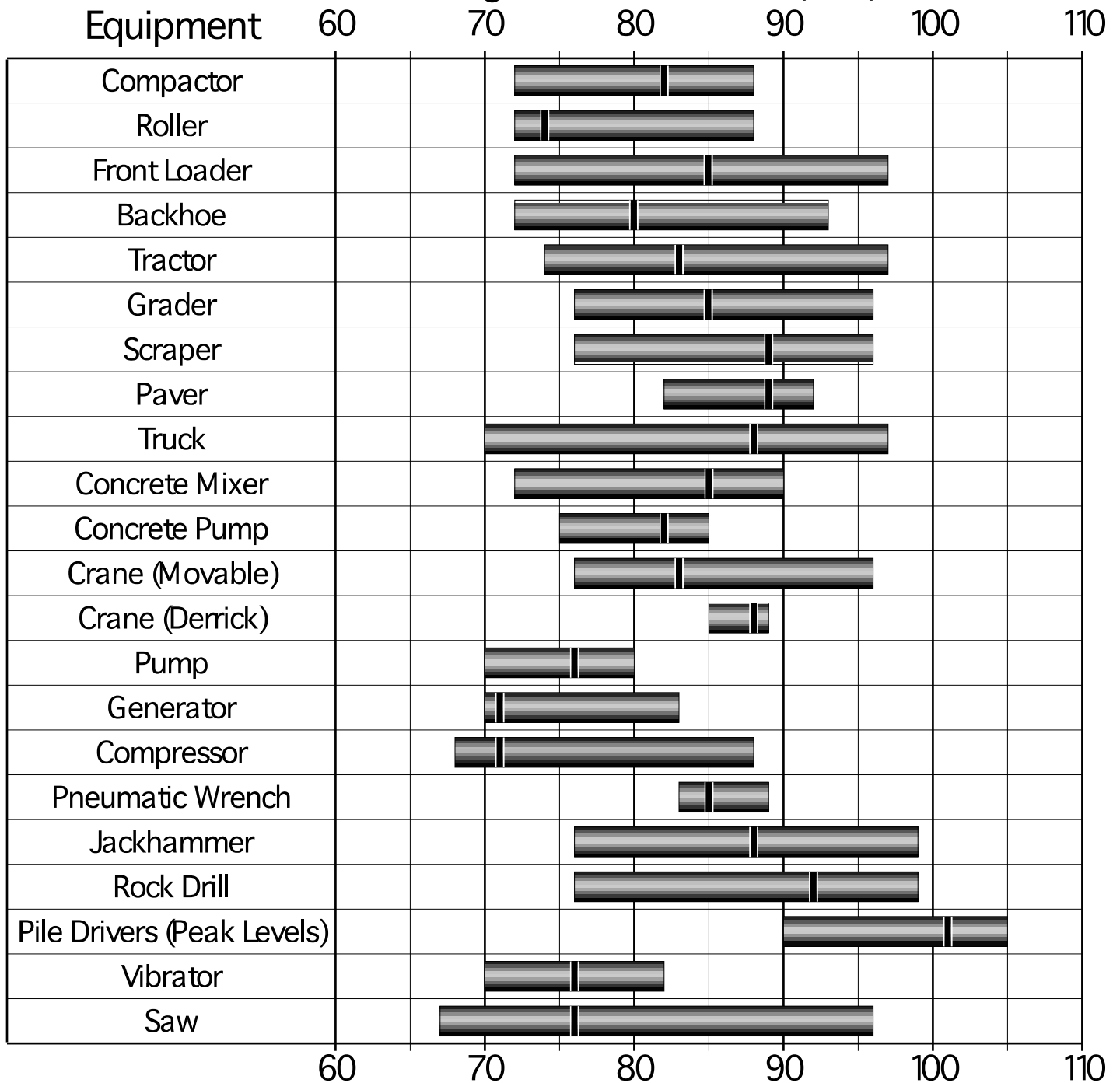
Worst-case examples of construction noise at 50 feet are presented in Exhibit 13. The peak noise level for most of the equipment that would be used during construction is in the range of 70 to 95 dBA at a distance of 50 feet. Noise levels at further distances are less. For example, at 200 feet, the peak construction noise levels range of 58 to 83 dBA.

Noise measurements made by Mestre Greve Associates for other projects show that the noise levels generated by commonly used grading equipment (i.e., loaders, graders and trucks) generate noise levels that typically do not exceed the middle of the range shown in Exhibit 13. That is, the measurements show that construction noise levels are usually in the low range to mid range shown in the table. However, the noise levels shown in Exhibit 13 will be used as the basis for the estimates presented here, and represent a worst-case estimate.

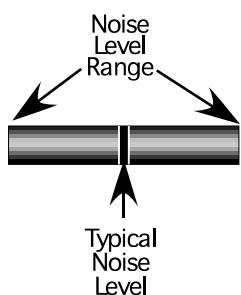
Those projects that are planned to occur near residential or mixed-use neighborhoods tend to be at the highest risk for causing noise impacts because the distance from construction activity to sensitive land uses is least in those neighborhoods, and also because residential neighborhoods have the lowest noise standard thresholds. Without knowing the details of the project in question, only an rough estimate of the construction noise impacts due to a project can be obtained. For a typical construction project that is as close as 50 feet from residential land uses, the worst-case unmitigated peak construction noise levels could be as high 95 dBA. The average noise levels are typically 5 to 15 dB lower than the peak noise levels, so average noise levels (Leq) at the nearest residences could be in the range of 85 dBA (Leq). These noise levels would be in excess of that which is permitted by the noise ordinance. Construction activity could be closer than 50 feet, in which case the noise impacts would be even greater. Projects that are farther away than 50 feet from sensitive land uses can still generate noise levels that exceed the noise standard thresholds.

It should be noted that the Rancho Cucamonga noise ordinance exempts construction noise that occurs between the hours of 6:30 a.m. and 8:00 p.m. on any day except Sundays and national holidays if the noise level does not exceed the noise level specified by Table 2 where the basic noise level used to determine the noise threshold is 65 dBA. This means that for non-impulsive noise, the L25 has to be less than 65 dBA, the L16.7 has to be less than 70 dBA, the L8.3 has to be less than 79 dBA, and Lmax has to be less than 80 dBA. Noisy construction projects may exceed one or more of these noise limits. The determination of whether or not a particular project would violate the noise standards would need to be analyzed on a case-by-case basis. If any of these noise thresholds were to be violated for unmitigated noise levels, appropriate mitigation measures would have to be designed to bring the noise level down to an acceptable level.

A-Weighted Sound Level (dBA) At 50 Feet



LEGEND



Sources: "Handbook of Noise Control,"
by Cyril Harris, 1979
"Transit Noise and Vibration Impact Assessment"
by Federal Transit Administration, 1995

Exhibit 13

Typical Construction Equipment Noise Levels

Projects that use an inordinate amount of noisy construction equipment simultaneously, or are very close to sensitive land uses can produce noise level that violate these noise standards, however, in most cases, if a project complies with the noise ordinance; construction noise impacts are usually eliminated.

2.3 Long-Term Impacts

The General Plan largely provides for a continuation of established land use patterns, with the exception of introducing mixed-use development along Foothill Boulevard. Also, intensification of uses will occur as development continues on infill sites. Increased traffic along the roadways in the City could increase the traffic noise level at land uses near the roadways experiencing the increased traffic flow.

This section examines the long-term traffic noise impacts that will occur at various locations throughout the City due to changes in traffic volume. In particular, this section will examine the noise impacts that will occur with long-term implementation of land use policy. This section will also examine how those changes differ from what would have occurred if the previous General Plan were to be implemented.

2.3.1 Traffic Noise Impacts Due to the new General Plan Buildout

Traffic volumes were compared in order to determine potential traffic noise increases. The traffic study prepared for the new General Plan provided traffic volumes for both existing conditions as well as traffic volumes for the buildout date (year 2030). The existing General Plan from 2001 provided future traffic volumes for buildout, which was assumed to occur in the year 2020. Table 9 shows the expected incremental traffic noise level increases on adjacent roadways. The data under the column labeled “Cumulative” represents the increase in noise from existing conditions to the year 2030. Table 9 also shows the noise increase that is due to the change in the General Plan. The column labeled “Project Impact” represents the change in noise levels that will occur with the buildout of the proposed General Plan from what would have occurred with the buildout of the existing General Plan. The last column shows the neighborhood for all roadway segments that are projected to experience a cumulative noise increase of 1 dB or more. The noise level increases were calculated using the traffic volumes provided by both Kunzman Associates Inc (December 2009) and Urban Crossroad (October 2001).

The traffic report from the 2009 General Plan analyzed a different set of roadway segments than were analyzed in the traffic report from the previous General Plan that was prepared in 2001. Some of the roadway segments were common to both reports, while others were unique to only one of the reports. The project impact which compares the changes in traffic noise between the two General Plans could only be computed for those roadway segments that were common to both traffic reports, while the cumulative increase, which computes the future noise increase due to the 2009 General Plan, could only be computed for those roadway segments exclusive to the 2009 traffic report. Although a total of 114 roadway segments were examined overall, only 44 of the 114 roadway segments could be used to estimate the project impact noise increase and only 94 of the 114 roadway segments could be used to estimate the cumulative noise increase. When data was not available to make a comparison to compute the noise increase, the table entry was labeled “N/A”.

Table 9 Traffic Noise CNEL Increases in 2030 (dB)

Roadway Segment	Cumulative Impact (dB)	Project Impact (dB)	Impacted Neighborhood
19th Street			
City Border To Carnelian Street	1.6	-0.2	Residential
Carnelian Street To Hellman Avenue	1.0	-0.4	Residential, Retail
Hellman Avenue To Archibald Avenue	1.1	N/A	Residential
Archibald Avenue To Hermosa Avenue	0.7	N/A	
Base Line Road			
City Border To Carnelian Street	2.0	-0.6	Residential
Carnelian Street To Hellman Avenue	0.9	-1.2	
Hellman Avenue To Archibald Avenue	0.5	N/A	
Archibald Avenue To Hermosa Avenue	0.4	-1.5	
Hermosa Avenue To Haven Avenue	0.9	-1.6	
Haven Avenue To Spruce Avenue	0.7	-1.3	
Spruce Avenue To Milliken Avenue	1.0	N/A	Residential
Milliken Avenue To Rochester Avenue	1.0	N/A	Residential
Victoria Park Lane To Etiwanda Avenue	1.4	N/A	Residential
Etiwanda Avenue To East Avenue	1.3	N/A	Residential
East Avenue To Americana Way	0.4	N/A	
Americana Way To Cherry Avenue	0.4	N/A	
Foothill Boulevard			
Campus Avenue To Grove Avenue	0.6	N/A	
Grove Avenue To Baker Avenue	0.4	N/A	
Baker Avenue To Vineyard Avenue	0.9	-0.8	
Vineyard Avenue To Hellman Avenue	1.2	-0.5	Residential
Hellman Avenue To Archibald Avenue	1.1	-0.5	Residential
Archibald Avenue To Hermosa Avenue	1.1	-1.5	Residential
Hermosa Avenue To Haven Avenue	0.8	-2.1	
Haven Avenue To Spruce Avenue	1.4	-0.4	Residential
Spruce Avenue To Milliken Avenue	1.1	N/A	Residential
Milliken Avenue To Rochester Avenue	1.0	N/A	Residential
Day Creek Boulevard To I-15 Freeway	0.4	N/A	
I-15 Freeway To Etiwanda Avenue	2.4	N/A	Residential
Etiwanda Avenue To East Avenue	2.1	N/A	Residential
Arrow Route			
Campus Avenue To Grove Avenue	1.0	N/A	Residential
Grove Avenue To Baker Avenue	0.4	N/A	
Baker Avenue To Vineyard Avenue	0.7	-0.4	
Vineyard Avenue To Hellman Avenue	0.7	-1.0	
Hellman Avenue To Archibald Avenue	0.7	-0.5	
Archibald Avenue To Hermosa Avenue	0.4	-0.3	
Hermosa Avenue To Haven Avenue	0.5	0.8	

Table 9 Traffic Noise CNEL Increases in 2030 (dB) (Cont.)

Roadway Segment	Cumulative Impact (dB)	Project Impact (dB)	Impacted Neighborhood
Arrow Route			
Haven Avenue To Milliken Avenue	0.4	-0.6	
Milliken Avenue To Rochester Avenue	1.6	N/A	Industrial, Ball Park
Rochester Avenue To Etiwanda Avenue	3.8	N/A	Office, Industrial
Etiwanda Avenue To East Avenue	0.9	N/A	
4th Street			
Hellman Avenue To Archibald Avenue	2.6	N/A	Residential
Archibald Avenue To Hermosa Avenue	2.7	-1.2	Residential, Industrial
Haven Avenue To Milliken Avenue	1.2	-0.7	Residential
Milliken Avenue To I-15 Freeway	0.9	N/A	
Grove Avenue			
14th Street To Foothill Boulevard	0.5	N/A	
Foothill Boulevard To Arrow Route	0.4	N/A	
Arrow Route To 8th Street	0.8	N/A	
Vineyard Avenue/Carnelian Street			
Lemmon Avenue To SR-210 Freeway	0.4	-0.2	
SR-210 Freeway To 19th Street	0.5	1.5	
19th Street To Base Line Road	0.7	2.0	
Base Line Road To Red Hill Country Club Drive	1.0	0.9	Residential
Red Hill Country Club Drive To Foothill Boulevard	0.8	2.1	
Foothill Boulevard To Arrow Route	0.7	0.5	
Arrow Route To 8th Street	1.1	1.1	Offices, Industrial
Archibald Avenue			
Lemmon Avenue To SR-210 Freeway	0.4	1.9	
SR-210 Freeway To 19th Street	0.4	-0.3	
19th Street To Base Line Road	1.2	1.1	Residential
Base Line Road To Church Street	1.5	1.3	Residential
Church Street To Foothill Boulevard	1.0	0.8	Residential, Retail Residential, School,
Foothill Boulevard To Arrow Route	1.3	0.9	Commercial
Arrow Route To 8th Street	0.9	0.7	
6th Street To 4th Street	0.9	1.9	
4th Street To Inland Empire Boulevard	0.8	1.2	
Haven Avenue			
Lemmon Avenue To SR-210 Freeway	1.6	4.7	Retail
SR-210 Freeway To 19th Street	1.7	1.8	Residential
19th Street To Base Line Road	1.1	1.3	Residential, Retail
Base Line Road To Church Street	1.3	0.5	Residential
Church Street To Foothill Boulevard	1.6	0.8	Retail, Offices
Foothill Boulevard To Arrow Route	2.5	1.4	Retail, Univ, Fire Depart.

Table 9 Traffic Noise CNEL Increases in 2030 (dB) (Cont.)

Roadway Segment	Cumulative Impact (dB)	Project Impact (dB)	Impacted Neighborhood
Haven Avenue			
Arrow Route To 8th Street	2.1	0.3	Commercial, Offices
Milliken Avenue			
Banyan Street To SR-210 Freeway	1.3	N/A	Residential
SR-210 Freeway To Victoria Park Lane	0.4	N/A	
Victoria Park Lane To Base Line Road	0.8	N/A	
Base Line Road To Terra Vista Parkway	0.9	N/A	
Terra Vista Parkway To Foothill Boulevard	1.4	N/A	Residential, Medical Center
Foothill Boulevard To Arrow Route	0.9	N/A	
Arrow Route To 6th Street	0.4	N/A	
6th Street To 4th Street	0.4	N/A	
4th Street To Inland Empire Boulevard	0.4	N/A	
Rochester Avenue			
Foothill Boulevard To Arrow Route	2.6	N/A	Residential, Retail, Commercial, Ball Park
Arrow Route To 6th Street	1.3	N/A	Commercial, Offices
Day Creek Boulevard			
Banyan Street To SR-210 Freeway	0.4	N/A	
SR-210 Freeway To Highland Avenue	0.4	N/A	
Etiwanda Avenue			
Victoria Street To Base Line Road	1.5	N/A	Residential, School, Historic Site
Base Line Road To Miller Avenue	0.7	N/A	
Miller Avenue To Foothill Boulevard	1.2	N/A	Residential
Foothill Boulevard To Arrow Route	0.8	N/A	
Arrow Route To City Boundary	0.7	N/A	
East Avenue			
Victoria Street To Base Line Road	2.1	N/A	Residential
Base Line Road To Miller Avenue	1.1	N/A	Residential
Americana Way			
North of Base Line Road	0.8	N/A	
South of Base Line Road	0.5	N/A	
Beach Avenue			
Cherry Avenue To I-15 Freeway	2.5	N/A	Residential
I-15 Freeway To SR-210 Freeway	2.7	N/A	Residential, Some Retail
I-15 Freeway			
Wilson Avenue To I-210 Freeway	2.7	N/A	Commercial Site
I-210 Freeway To Base Line Road	2.1	N/A	Residential, Hotel, Retail
Base Line Road To Foothill Boulevard	1.9	N/A	Residential, Retail
Foothill Boulevard To Arrow Route	0.6	N/A	
Arrow Route To San Bernardino Avenue	2.0	N/A	Industrial

Table 9 Traffic Noise CNEL Increases in 2030 (dB) (Cont.)

Roadway Segment	Cumulative (dB)	Project Impact (dB)	Impacted Neighborhood
I-210 Freeway			
City Border To Carnelian Street	0.9	N/A	
Carnelian Street To Archibald Avenue	1.1	N/A	Residential, Retail, Park Residential, School,
Archibald Avenue To Haven Avenue	1.1	N/A	Retail
Haven Avenue To Milliken Avenue	1.2	N/A	Residential, Retail
Milliken Avenue To Day Creek Boulevard	1.3	N/A	Residential, Retail
Day Creek Boulevard To I-15 Freeway	1.6	N/A	Residential

† From Roadway Centerline

N/A - Not Available

Examining the cumulative noise increases shows that only one roadway segment will experience a noise increase that exceeds 3 dB. That roadway segment is Arrow Route from Rochester Avenue to Etiwanda Avenue. The land use along this roadway segment is mainly industrial and some commercial offices interspersed with vacant lots. There are no residential units. The noise increase along that roadway segment is projected to be 3.8 dB. Since there are no residential land uses along this roadway segment, the noise impacts are not predicted to be significant even though the increase in noise exceeds 3 dB.

For the project only increase, only one roadway segment is projected to experience a noise increase in excess of 3 dB. That roadway segment is Haven Avenue from Lemmon Avenue to the SR-210 Freeway. The land use along this roadway segment is retail, and includes eating establishments, a gas station, and a drug store.

The noise increase along this roadway segment is projected to be 4.7 dB. There are no residential land uses along this roadway segment, so residential land uses will not be impacted. It should also be noted that although the noise level along this roadway segment will increase by more than 3 dB at buildout of the proposed General Plan in comparison to the buildout from the existing General Plan, the actual noise increase along this roadway segment will only be 1.6 dB above the current noise level. Therefore, the projected future noise impact along this roadway segment will not be significant. Of the 44 roadway segments that were compared between the existing and proposed General Plans, 22 of the roadway segments are projected to experience a reduction in noise level.

Any small noise increase (as measured on the decibel scale) in an area where the existing noise level is high would be judged to have a greater impact than it would on those areas where the existing noise level is low. Since it is not known what the actual CNEL noise level is at every sensitive receptor within the city, it is possible that some sensitive receptors may already be experiencing noise levels that are in excess of the limit specified by the noise ordinance standards. If that is the case, a small noise increase in those areas may cause a significant impact. For the purposes of identifying those areas that may potentially be impacted by small noise level

increases, all roadway segments that are projected to experience a noise increase of 1 dB or more have been identified.

There are a total of 54 roadway segments that will experience a cumulative noise increase of 1 dB or more. The neighborhoods surrounding 45 of the 54 roadway segments contains residential units or schools. Residential and school neighborhoods are considered to be more sensitive than other neighborhoods. For every one of the 45 roadway segments that has a sensitive receptor that is currently experiencing noise levels that are in excess of the standards, the project would cause an impact along that roadway segment. The neighborhoods surrounding the remaining 9 roadway segments would consist of office, industrial, retail, commercial, or parks. These neighborhoods are less sensitive to small increases in noise than residential or school neighborhoods, and would therefore be less likely to experience a significant impact.

Table 10 shows the projected noise levels for the 2030 General Plan buildout. These noise levels were estimated using soft site conditions. The table shows the CNEL noise level at 100 feet from the centerline of the roadway for each of the roadway segment as well as the 55, 60, 65 and 70 CNEL noise contours. These contours do not take into account the effect of any noise barriers or topography that may reduce traffic noise levels. The noise levels were calculated using traffic volumes presented in the previously referenced traffic study prepared for the project by Kunzman Associates Inc. The CNEL calculations utilized a generic traffic mix. The traffic volumes and the traffic mix that are used in the calculations are presented in the appendix.

Table 10 Future 2030 With Project Traffic Noise Levels

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
19th Street					
City Border To Carnelian Street	69.4	913	424	197	91
Carnelian Street To Hellman Avenue	69.3	899	417	194	90
Hellman Avenue To Archibald Avenue	69.2	888	412	191	89
Archibald Avenue To Hermosa Avenue	68.4	782	363	169	78
Base Line Road					
City Border To Carnelian Street	71.4	1,236	574	266	124
Carnelian Street To Hellman Avenue	70.3	1,047	486	226	105
Hellman Avenue To Archibald Avenue	70.5	1,073	498	231	107
Archibald Avenue To Hermosa Avenue	70.0	1,001	465	216	100
Hermosa Avenue To Haven Avenue	71.2	1,195	555	257	120
Haven Avenue To Spruce Avenue	71.2	1,195	555	257	120
Spruce Avenue To Milliken Avenue	72.2	1,392	646	300	139
Milliken Avenue To Rochester Avenue	71.7	1,291	599	278	129
Victoria Park Lane To Etiwanda Avenue	71.8	1,319	612	284	132
Etiwanda Avenue To East Avenue	72.2	1,402	651	302	140
East Avenue To Americana Way	72.9	1,565	726	337	156
Americana Way To Cherry Avenue	72.1	1,374	638	296	137

Table 10 Future 2030 With Project Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Foothill Boulevard					
Campus Avenue To Grove Avenue	71.7	1,303	605	281	130
Grove Avenue To Baker Avenue	72.5	1,478	686	318	148
Baker Avenue To Vineyard Avenue	72.9	1,556	722	335	156
Vineyard Avenue To Hellman Avenue	72.8	1,534	712	331	153
Foothill Boulevard					
Hellman Avenue To Archibald Avenue	73.1	1,597	741	344	160
Archibald Avenue To Hermosa Avenue	72.7	1,503	698	324	150
Hermosa Avenue To Haven Avenue	72.0	1,357	630	292	136
Haven Avenue To Spruce Avenue	73.7	1,772	823	382	177
Spruce Avenue To Milliken Avenue	73.5	1,718	797	370	172
Milliken Avenue To Rochester Avenue	74.7	2,044	949	440	204
Day Creek Boulevard To I-15 Freeway	75.5	2,342	1,087	505	234
I-15 Freeway To Etiwanda Avenue	74.7	2,049	951	441	205
Etiwanda Avenue To East Avenue	74.3	1,932	897	416	193
Arrow Route					
Campus Avenue To Grove Avenue	65.6	505	235	109	51
Grove Avenue To Baker Avenue	68.3	773	359	167	77
Baker Avenue To Vineyard Avenue	69.6	942	437	203	94
Vineyard Avenue To Hellman Avenue	69.8	966	449	208	97
Hellman Avenue To Archibald Avenue	70.2	1,032	479	222	103
Archibald Avenue To Hermosa Avenue	71.8	1,321	613	285	132
Hermosa Avenue To Haven Avenue	72.2	1,392	646	300	139
Haven Avenue To Milliken Avenue	72.0	1,351	627	291	135
Milliken Avenue To Rochester Avenue	72.6	1,480	687	319	148
Rochester Avenue To Etiwanda Avenue	74.8	2,099	974	452	210
Etiwanda Avenue To East Avenue	70.2	1,028	477	221	103
4th Street					
Hellman Avenue To Archibald Avenue	72.1	1,371	636	295	137
Archibald Avenue To Hermosa Avenue	72.0	1,357	630	292	136
Haven Avenue To Milliken Avenue	73.6	1,746	810	376	175
Milliken Avenue To I-15 Freeway	73.6	1,725	801	372	173
Grove Avenue					
14 th Street To Foothill Boulevard	63.5	370	172	80	37
Foothill Boulevard To Arrow Route	68.3	773	359	167	77
Arrow Route To 8 th Street	68.8	838	389	180	84
Vineyard Avenue/Carnelian Street					
Lemmon Avenue To SR-210 Freeway	70.6	1,102	511	237	110
SR-210 Freeway To 19 th Street	71.8	1,324	614	285	132
19 th Street To Base Line Road	72.3	1,429	663	308	143
Base Line Road To Red Hill Country Club Drive	71.8	1,327	616	286	133
Red Hill Country Club Drive To Foothill Boulevard	73.1	1,600	743	345	160
Foothill Boulevard To Arrow Route	71.8	1,321	613	285	132
Arrow Route To 8 th Street	72.0	1,354	628	292	135

Table 10 Future 2030 With Project Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Archibald Avenue					
Lemmon Avenue To SR-210 Freeway	68.9	843	391	182	84
SR-210 Freeway To 19 th Street	71.7	1,291	599	278	129
19 th Street To Base Line Road	71.4	1,245	578	268	124
Base Line Road To Church Street	72.1	1,377	639	297	138
Church Street To Foothill Boulevard	71.5	1,266	588	273	127
Foothill Boulevard To Arrow Route	72.3	1,429	663	308	143
Arrow Route To 8 th Street	72.5	1,467	681	316	147
6 th Street To 4 th Street	72.8	1,545	717	333	155
4 th Street To Inland Empire Boulevard	72.4	1,441	669	310	144
Haven Avenue					
Lemmon Avenue To SR-210 Freeway	75.0	2,160	1,003	465	216
SR-210 Freeway To 19 th Street	74.0	1,844	856	397	184
19 th Street To Base Line Road	74.5	1,995	926	430	199
Base Line Road To Church Street	73.9	1,828	849	394	183
Church Street To Foothill Boulevard	74.3	1,932	897	416	193
Foothill Boulevard To Arrow Route	75.3	2,258	1,048	487	226
Arrow Route To 8 th Street	75.4	2,288	1,062	493	229
Milliken Avenue					
Banyan Street To SR-210 Freeway	70.8	1,125	522	242	113
SR-210 Freeway To Victoria Park Lane	73.1	1,606	746	346	161
Victoria Park Lane To Base Line Road	73.4	1,691	785	364	169
Base Line Road To Terra Vista Parkway	73.2	1,641	762	354	164
Terra Vista Parkway To Foothill Boulevard	73.7	1,768	821	381	177
Foothill Boulevard To Arrow Route	74.1	1,888	876	407	189
Arrow Route To 6 th Street	74.1	1,867	867	402	187
6 th Street To 4 th Street	74.2	1,917	890	413	192
4 th Street To Inland Empire Boulevard	73.4	1,675	778	361	168
Rochester Avenue					
Foothill Boulevard To Arrow Route	72.6	1,486	690	320	149
Arrow Route To 6 th Street	70.6	1,092	507	235	109
Day Creek Boulevard					
Banyan Street To SR-210 Freeway	69.9	987	458	213	99
SR-210 Freeway To Highland Avenue	72.3	1,427	662	307	143
Etiwanda Avenue					
Victoria Street To Base Line Road	66.5	587	272	126	59
Base Line Road To Miller Avenue	68.7	813	377	175	81
Miller Avenue To Foothill Boulevard	69.3	895	415	193	90
Foothill Boulevard To Arrow Route	70.9	1,152	535	248	115
Arrow Route To City Boundary	71.0	1,172	544	253	117
East Avenue					
Victoria Street To Base Line Road	67.7	698	324	150	70
Base Line Road To Miller Avenue	66.7	604	281	130	60

Table 10 Future 2030 With Project Traffic Noise Levels (Cont.)

Roadway Segment	CNEL @ 100' †	Distance To CNEL Contour from Centerline of Roadway (feet)			
		55 CNEL	60 CNEL	65 CNEL	70 CNEL
Americana Way					
North of Base Line Road	60.4	230	107	50	23
South of Base Line Road	62.0	292	135	63	29
Beach Avenue					
Cherry Avenue To I-15 Freeway	70.3	1,042	484	224	104
I-15 Freeway To SR-210 Freeway	70.8	1,130	524	243	113
I-15 Freeway					
Wilson Avenue To I-210 Freeway	80.7	5,181	2,405	1,116	518
I-210 Freeway To Base Line Road	80.9	5,327	2,472	1,148	533
Base Line Road To Foothill Boulevard	81.2	5,554	2,578	1,197	555
Foothill Boulevard To Arrow Route	81.2	5,554	2,578	1,197	555
Arrow Route To San Bernardino Avenue	82.1	6,375	2,959	1,373	637
I-210 Freeway					
City Border To Carnelian Street	81.5	5,822	2,702	1,254	582
Carnelian Street To Archibald Avenue	81.5	5,865	2,723	1,264	587
Archibald Avenue To Haven Avenue	81.5	5,832	2,707	1,256	583
Haven Avenue To Milliken Avenue	81.3	5,652	2,623	1,218	565
Milliken Avenue To Day Creek Boulevard	81.3	5,705	2,648	1,229	571
Day Creek Boulevard To I-15 Freeway	81.3	5,629	2,613	1,213	563

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APPENDIX

Table A-1 Traffic Volumes Used For Noise Modeling (ADTs)

Road Segment	Speed (mph)	Existing	New	Old
			General Plan 2030	General Plan 2020
19th Street				
City Border To Carnelian Street	45	11700	16900	17600
Carnelian Street To Hellman Avenue	45	13000	16500	18200
Hellman Avenue To Archibald Avenue	45	12600	16200	N/A
Archibald Avenue To Hermosa Avenue	45	11300	13400	N/A
Base Line Road				
City Border To Carnelian Street	45	16800	26600	30800
Carnelian Street To Hellman Avenue	40	20100	24600	32600
Hellman Avenue To Archibald Avenue	40	22500	25500	N/A
Archibald Avenue To Hermosa Avenue	40	20900	23000	32400
Hermosa Avenue To Haven Avenue	45	20800	25300	36200
Haven Avenue To Spruce Avenue	45	21500	25300	34300
Spruce Avenue To Milliken Avenue	50	21700	27100	N/A
Milliken Avenue To Rochester Avenue	50	19100	24200	N/A
Victoria Park Lane To Etiwanda Avenue	50	18300	25000	N/A
Etiwanda Avenue To East Avenue	50	20200	27400	N/A
East Avenue To Americana Way	50	29400	32300	N/A
Americana Way To Cherry Avenue	45	28400	31200	N/A
Foothill Boulevard				
Campus Avenue To Grove Avenue	45	25300	28800	N/A
Grove Avenue To Baker Avenue	45	31600	34800	N/A
Baker Avenue To Vineyard Avenue	45	30700	37600	45500
Vineyard Avenue To Hellman Avenue	45	28100	36800	41700
Hellman Avenue To Archibald Avenue	45	30100	39100	43600
Archibald Avenue To Hermosa Avenue	45	28000	35700	50600
Hermosa Avenue To Haven Avenue	45	25400	30600	49700
Haven Avenue To Spruce Avenue	45	33000	45700	50300
Spruce Avenue To Milliken Avenue	45	34100	43600	N/A
Milliken Avenue To Rochester Avenue	45	44600	56600	N/A
Day Creek Boulevard To I-15 Freeway	45	63100	69400	N/A
I-15 Freeway To Etiwanda Avenue	45	32600	56800	N/A
Etiwanda Avenue To East Avenue	45	31700	52000	N/A
Arrow Route				
Campus Avenue To Grove Avenue	35	7800	9900	N/A
Grove Avenue To Baker Avenue	40	14100	15600	N/A
Baker Avenue To Vineyard Avenue	45	15200	17700	19400
Vineyard Avenue To Hellman Avenue	45	15700	18400	22900
Hellman Avenue To Archibald Avenue	45	17100	20300	22900
Archibald Avenue To Hermosa Avenue	45	26700	29400	31300
Hermosa Avenue To Haven Avenue	45	28300	31800	26200
Haven Avenue To Milliken Avenue	50	23500	25900	30000
Milliken Avenue To Rochester Avenue	50	20700	29700	N/A
Rochester Avenue To Etiwanda Avenue	50	20800	50200	N/A
Etiwanda Avenue To East Avenue	50	14100	17200	N/A

Table A-1 Traffic Volumes Used For Noise Modeling (ADTs) (Cont.)

Road Segment	Speed (mph)	Existing	New	Old
			General Plan 2030	General Plan 2020
8th Street				
Baker Avenue To Vineyard Avenue	45	N/A	N/A	6900
Vineyard Avenue To Hellman Avenue	45	N/A	N/A	8800
Hellman Avenue To Archibald Avenue	45	N/A	N/A	3900
Archibald Avenue To Hermosa Avenue	45	N/A	N/A	8800
Hermosa Avenue To Haven Avenue	45	N/A	N/A	5500
6th Street				
Hellman Avenue To Archibald Avenue	35	N/A	N/A	11600
4th Street				
Hellman Avenue To Archibald Avenue	50	14500	26500	N/A
Archibald Avenue To Hermosa Avenue	50	14100	26100	34600
Haven Avenue To Milliken Avenue	55	25000	32700	38000
Milliken Avenue To I-15 Freeway	50	30200	37400	N/A
Grove Avenue				
14 th Street To Foothill Boulevard	35	5500	6200	N/A
Foothill Boulevard To Arrow Route	40	14200	15600	N/A
Arrow Route To 8 th Street	40	14800	17600	N/A
Vineyard Avenue/Carnelian Street				
Lemmon Avenue To SR-210 Freeway	45	20400	22400	23300
SR-210 Freeway To 19 th Street	45	26200	29500	20900
19 th Street To Base Line Road	45	28200	33100	20900
Base Line Road To Red Hill Country Club Drive	45	23600	29600	24000
Red Hill Country Club Drive To Foothill Boulevard	45	32500	39200	24000
Foothill Boulevard To Arrow Route	45	25100	29400	26200
Arrow Route To 8 th Street	45	23500	30500	23900
8 th Street To 6 th Street	50	N/A	N/A	26400
6 th Street To 4 th Street	50	N/A	N/A	29800
4 th Street To Inland Empire Boulevard	50	N/A	N/A	42500
Hellman Avenue				
19 th Street To Base Line Road	35	N/A	N/A	5100
Arrow Route To 8 th Street	45	N/A	N/A	11400
Archibald Avenue				
Lemmon Avenue To SR-210 Freeway	45	13600	15000	9700
SR-210 Freeway To 19 th Street	45	25800	28400	30200
19 th Street To Base Line Road	45	20200	26900	20900
Base Line Road To Church Street	45	22400	31300	23100
Church Street To Foothill Boulevard	45	21900	27600	23100
Foothill Boulevard To Arrow Route	45	24800	33100	27000
Arrow Route To 8 th Street	45	28100	34400	29200
8 th Street To 6 th Street	45	N/A	N/A	25100
6 th Street To 4 th Street	45	30100	37200	24200
4 th Street To Inland Empire Boulevard	45	27700	33500	25600

Table A-1 Traffic Volumes Used For Noise Modeling (ADTs) (Cont.)

Road Segment	Speed (mph)	Existing	New General Plan 2030	Old General Plan 2020
Hermosa Avenue				
19 th Street To Base Line Road	45	N/A	N/A	15400
Base Line Road To Foothill Boulevard	45	N/A	N/A	11100
Foothill Boulevard To Arrow Route	45	N/A	N/A	13400
Arrow Route To 8 th Street	45	N/A	N/A	11000
6 th Street To 4 th Street	45	N/A	N/A	7000
Haven Avenue				
Lemmon Avenue To SR-210 Freeway	45	42700	61500	20900
SR-210 Freeway To 19 th Street	45	32500	48500	31800
19 th Street To Base Line Road	50	36400	46500	34100
Base Line Road To Church Street	50	30500	40800	36700
Church Street To Foothill Boulevard	50	31000	44300	36700
Foothill Boulevard To Arrow Route	50	31800	56000	40400
Arrow Route To 8 th Street	50	34900	57100	53500
8 th Street To 6 th Street	50	N/A	N/A	54400
6 th Street To 4 th Street	50	N/A	N/A	56800
4 th Street To Inland Empire Boulevard	50	N/A	N/A	49500
Milliken Avenue				
Banyan Street To SR-210 Freeway	50	14700	19700	N/A
SR-210 Freeway To Victoria Park Lane	50	30500	33600	N/A
Victoria Park Lane To Base Line Road	50	30300	36300	N/A
Base Line Road To Terra Vista Parkway	50	27900	34700	N/A
Terra Vista Parkway To Foothill Boulevard	50	28300	38800	N/A
Foothill Boulevard To Arrow Route	50	34700	42800	N/A
Arrow Route To 6 th Street	50	38300	42100	N/A
6 th Street To 4 th Street	50	39800	43800	N/A
4 th Street To Inland Empire Boulevard	45	38200	42000	N/A
Rochester Avenue				
Foothill Boulevard To Arrow Route	45	19300	35100	N/A
Arrow Route To 6 th Street	45	16300	22100	N/A
Day Creek Boulevard				
Banyan Street To SR-210 Freeway	45	17300	19000	N/A
SR-210 Freeway To Highland Avenue	45	30000	33000	N/A
Etiwanda Avenue				
Victoria Street To Base Line Road	45	6200	8700	N/A
Base Line Road To Miller Avenue	45	12100	14200	N/A
Miller Avenue To Foothill Boulevard	45	12500	16400	N/A
Foothill Boulevard To Arrow Route	50	17100	20400	N/A
Arrow Route To City Boundary	55	15300	18000	N/A
East Avenue				
Victoria Street To Base Line Road	45	7000	11300	N/A
Base Line Road To Miller Avenue	45	7100	9100	N/A

Table A-1 Traffic Volumes Used For Noise Modeling (ADTs) (Cont.)

Road Segment	Speed (mph)	Existing	New	Old
			General Plan 2030	General Plan 2020
Americana Way				
North of Base Line Road	25	2900	3500	N/A
South of Base Line Road	25	4500	5000	N/A
Beach Avenue				
Cherry Avenue To I-15 Freeway	45	11600	20600	N/A
I-15 Freeway To SR-210 Freeway	35	17600	33100	N/A
I-15 Freeway				
Wilson Avenue To I-210 Freeway	65	96803	180128	N/A
I-210 Freeway To Base Line Road	65	114848	187788	N/A
Base Line Road To Foothill Boulevard	65	129312	199963	N/A
Foothill Boulevard To Arrow Route	65	175901	199963	N/A
Arrow Route To San Bernardino Avenue	65	156234	245864	N/A
I-210 Freeway				
City Border To Carnelian Street	65	157342	191585	N/A
Carnelian Street To Archibald Avenue	65	150196	193749	N/A
Archibald Avenue To Haven Avenue	65	150090	192094	N/A
Haven Avenue To Milliken Avenue	65	137958	183251	N/A
Milliken Avenue To Day Creek Boulevard	65	136879	185870	N/A
Day Creek Boulevard To I-15 Freeway	65	126876	182146	N/A

Table A-2 Vehicle Mix Used For Noise Modeling (Surface Streets)

	Day	Eve	Night
Auto	69.50%	12.90%	9.60%
Medium Truck	1.44%	0.06%	1.50%
Heavy Truck	2.40%	0.10%	2.50%

Table A-3 Vehicle Mix Used For Noise Modeling (I-15 Freeway)

	Day	Eve	Night
Auto	64.94%	14.23%	15.84%
Medium Truck	1.28%	0.28%	0.31%
Heavy Truck	2.14%	0.47%	0.52%

Table A-4 Vehicle Mix Used For Noise Modeling (I-210 Freeway)

	Day	Eve	Night
Auto	63.87%	10.93%	20.20%
Medium Truck	1.26%	0.22%	0.40%
Heavy Truck	2.10%	0.36%	0.66%

Appendix H
Traffic Study



KUNZMAN ASSOCIATES, INC.

OVER 30 YEARS OF EXCELLENT SERVICE

December 10, 2009

Ms. Laura Stetson, AICP
HOGLE-IRELAND, INC.
201 South Lake Avenue, Suite 308
Pasadena, CA 91101

Dear Ms. Stetson:

INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide this traffic study for the City of Rancho Cucamonga General Plan Update. The City of Rancho Cucamonga location map is illustrated on Figure 1. The traffic study includes a field inventory of intersection traffic control devices and intersection approach lanes, use of traffic counts provided by the City of Rancho Cucamonga, comparison of 2001 existing General Plan trip generation projections to 2009 proposed General Plan trip generation projections, and intersection Level of Service calculations for existing and Year 2030 traffic conditions.

Based upon discussions with City of Rancho Cucamonga staff, the study area intersections are illustrated on Figure 2. The study area intersections include the SR-210 Freeway and I-15 Freeway interchanges located within the City of Rancho Cucamonga boundary.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

EXISTING TRAFFIC VOLUMES

Figure 3 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were obtained from the Year 2007/2008/2009 traffic counts provided by the City of Rancho Cucamonga (see Appendix B) and factored from peak hour counts provided to Kunzman Associates, Inc. using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach + Exit Volume)} \times 11.5 = \text{Daily Leg Volume.}$$

Existing intersection turning movement volumes were established through Year 2007/2008/2009 morning and evening peak hour traffic counts provided by the City of Rancho Cucamonga and shown on Figures 4 and 5, respectively. The morning and evening peak hour traffic volumes were identified by counting the two-hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM. The traffic counts

Ms. Laura Stetson
HOGLE-IRELAND, INC.
December 10, 2009

included truck classification counts at the study area intersections. The existing percent of trucks was used from the morning and evening peak hour traffic volumes in the conversion to Passenger Car Equivalents. For light duty trucks (such as service vehicles, buses, RV's and dual rear wheels), a Passenger Car Equivalent of 1.5 was used. For medium duty trucks with 3 axles, a Passenger Car Equivalent of 2.0 was used. For heavy duty trucks with 4 axles, a Passenger Car Equivalent of 3.0 was used.

LEVEL OF SERVICE METHODOLOGY

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix C) based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

$$(\text{Curb to curb distance}) / (4 \text{ feet/second}) + 7 \text{ seconds.}$$

For existing traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Year 2030 traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis to account for coordinated traffic signal timing/phasing.

The study area intersection Level of Service deficiency definition has been obtained from the City of Rancho Cucamonga General Plan. The General Plan states that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E/F will be considered deficient.

EXISTING LEVEL OF SERVICE ANALYSIS

The existing delay and Level of Service for the study area intersections are shown in Table 1. The existing lane geometrics are depicted on Figure 6. The study area intersections currently operate at Level of Service D or better during the peak hours for existing traffic conditions, except for the following study area intersections that operate at Level of Service E/F during the peak hours (see Table 1):

Ms. Laura Stetson
HOGLE-IRELAND, INC.
December 10, 2009

Etiwanda Avenue (NS) at:
Arrow Route (EW) - #32

East Avenue (NS) at:
Baseline Road (EW) - #33

Existing delay worksheets are provided in Appendix C.

LAND USE COMPARISON

The General Plan land use data has been divided into different categories for the 2001 existing General Plan and the 2009 proposed General Plan (see Table 2).

The traffic associated with buildout pursuant to General Plan land use policy (both current Plan and proposed Plan) is determined by multiplying an appropriate trip generation rate by dwelling units (residential) or square footage (non-residential). Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our lifestyles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the traffic generation rates by the land use assumptions, the traffic volumes are determined. Table 3 exhibits the traffic generation rates, project peak hour volumes, and project daily traffic volumes. The traffic generation rates are from the Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008.

The 2001 existing General Plan was projected to generate a total of approximately 2,091,263 daily vehicle trips, 128,771 of which would occur during the morning peak hour and 209,263 of which would occur during the evening peak hour.

The 2009 proposed General Plan is projected to generate a total of approximately 1,978,384 daily vehicle trips, 127,293 of which would occur during the morning peak hour and 199,585 of which would occur during the evening peak hour.

A traffic generation comparison has been conducted between the 2001 existing General Plan and the 2009 proposed General Plan (see Table 3). The 2001 existing General Plan compared to the 2009 proposed General Plan has the following:

- fewer single-family detached residential dwelling units
- fewer multi-family attached residential dwelling units
- more retail square footage
- more office square footage
- more industrial square footage

Ms. Laura Stetson
HOGLE-IRELAND, INC.
December 10, 2009

- more government acreage
- more schools acreage

Based upon the traffic generation comparison, the 2009 proposed General Plan is projected to generate approximately 112,879 fewer daily vehicle trips, 1,478 fewer of which would occur during the morning peak hour and 9,678 fewer of which would occur during the evening peak hour.

METHOD OF PROJECTION

The average daily traffic volume forecasts have been determined using the growth increment approach on the I-10 HOV Traffic Model Year 2003 and Year 2030 average daily traffic volume forecasts (see Appendix D). This difference defines the growth in traffic over the 27 year period (2003 to 2030). The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2009 and Year 2030. For this purpose, linear growth between the Year 2003 base condition and the forecast Year 2030 condition was assumed. Since the increment between Year 2009 and Year 2030 is 21 years of the 27 year time frame, a factor of 0.78 (i.e., 21/27) was used.

The Year 2030 daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the I-10 HOV Traffic Model Year 2003 and Year 2030 peak hour volumes. The growth increment calculation worksheets are shown in Appendix D. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs' forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth in Year 2030 over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

YEAR 2030 TRAFFIC VOLUMES

The Year 2030 average daily traffic volumes are shown on Figure 7. The Year 2030 morning and evening peak hour intersection turning movement volumes are shown on Figures 8 and 9, respectively.

YEAR 2030 LEVEL OF SERVICE ANALYSIS

The Year 2030 delay and Level of Service for the study area roadway network are shown in Table 4. Table 4 shows delay values based on the geometrics at the study area intersections, without and with improvements.

For Year 2030 traffic conditions, the following study area intersections are projected to operate at Level of Service E/F during the peak hours, without improvements:

Rochester Avenue (NS) at:
Arrow Route (EW) - #27

Etiwanda Avenue (NS) at:
Foothill Boulevard (EW) - #31
Arrow Route (EW) - #32

East Avenue (NS) at:
Baseline Road (EW) - #33

The Year 2030 delay and Level of Service for the study area roadway network with improvements are shown in Table 4. Year 2030 delay calculation worksheets are provided in Appendix C. As shown in Table 4, all of the study area intersections are projected to operate at Level of Service D or better during the peak hours for Year 2030 traffic conditions, with the following improvements:

Rochester Avenue (NS) at:
Arrow Route (EW) - #27

- Northbound Right Turn Overlap
- Eastbound Additional Left Turn Lane
- Westbound Right Turn Overlap

Etiwanda Avenue (NS) at:
Foothill Boulevard (EW) - #31

- Northbound Additional Through Lane
- Northbound Right Turn Lane
- Southbound Right Turn Lane
- Westbound Additional Through Lane

Arrow Route (EW) - #32

- Northbound Additional Through Lane
- Northbound Right Turn Lane
- Southbound Additional Through Lane
- Eastbound Additional Through Lane
- Westbound Right Turn Lane

Ms. Laura Stetson
HOGLE-IRELAND, INC.
December 10, 2009

East Avenue (NS) at:

Baseline Road (EW) - #33

- Northbound Left Turn Lane
- Northbound Additional Through Lane
- Southbound Additional Through Lane
- Eastbound Additional Through Lane
- Westbound Additional Through Lane

CONCLUSIONS

The study area intersections currently operate at Level of Service D or better during the peak hours for existing traffic conditions, except for the following study area intersections that operate at Level of Service E/F during the peak hours (see Table 1):

Etiwanda Avenue (NS) at:

Arrow Route (EW) - #32

East Avenue (NS) at:

Baseline Road (EW) - #33

A traffic generation comparison has been conducted between the 2001 existing General Plan and the 2009 proposed General Plan (see Table 3). Based upon the traffic generation comparison, the 2009 proposed General Plan is projected to generate approximately 112,879 fewer daily vehicle trips, 1,478 fewer of which would occur during the morning peak hour and 9,678 fewer of which would occur during the evening peak hour.

For Year 2030 traffic conditions, the following study area intersections are projected to operate at Level of Service E/F during the peak hours, without improvements (see Table 4):

Rochester Avenue (NS) at:

Arrow Route (EW) - #27

Etiwanda Avenue (NS) at:

Foothill Boulevard (EW) - #31

Arrow Route (EW) - #32

East Avenue (NS) at:

Baseline Road (EW) - #33

As shown in Table 4, all of the study area intersections are projected to operate at Level of Service D or better during the peak hours for Year 2030 traffic conditions, with the following improvements:

Rochester Avenue (NS) at:

Arrow Route (EW) - #27

Ms. Laura Stetson
HOGLE-IRELAND, INC.
December 10, 2009

- Northbound Right Turn Overlap
- Eastbound Additional Left Turn Lane
- Westbound Right Turn Overlap

Etiwanda Avenue (NS) at:

Foothill Boulevard (EW) - #31

- Northbound Additional Through Lane
- Northbound Right Turn Lane
- Southbound Right Turn Lane
- Westbound Additional Through Lane

Arrow Route (EW) - #32

- Northbound Additional Through Lane
- Northbound Right Turn Lane
- Southbound Additional Through Lane
- Eastbound Additional Through Lane
- Westbound Right Turn Lane

East Avenue (NS) at:

Baseline Road (EW) - #33

- Northbound Left Turn Lane
- Northbound Additional Through Lane
- Southbound Additional Through Lane
- Eastbound Additional Through Lane
- Westbound Additional Through Lane

No further improvements are required beyond those identified in the 2001 General Plan, all of which are included as well in the 2009 General Plan.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES, INC.

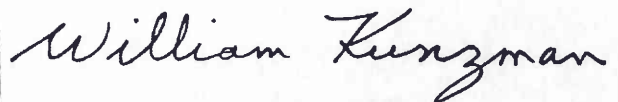


Carl Ballard
Principal Associate

#4586



KUNZMAN ASSOCIATES, INC.



William Kunzman, P.E.
Principal
Professional Registration
Expiration Date 3-31-2010

Table 1

Existing Intersection Delay and Level of Service¹

Intersection	Traffic Control ⁴	Intersection Approach Lanes ²												Peak Hour Delay-LOS ³		
		Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
		L	T	R	L	T	R	L	T	R	L	T	R			
Grove Avenue (NS) at:																
Foothill Boulevard (EW) - #1	TS	1	1	1	1	2	1	1	2	1	1	2	0	19.2-B	21.0-C	
Arrow Route (EW) - #2	TS	1	1	1	1	1	0	1	1	0	1	1	0	10.3-B	10.7-B	
Carnelian Street (NS) at:																
SR-210 Freeway WB Ramps (EW) - #3	TS	2	2	0	0	2	0	0	0	0	1.3	0.3	1.3	17.3-B	16.0-B	
SR-210 Freeway EB Ramps (EW) - #4	TS	0	2	0	2	2	0	1.3	0.3	1.3	0	0	0	11.4-B	18.9-B	
19th Street (EW) - #5	TS	1	2	0	1	2	0	1	2	0	1	2	0	29.6-C	29.4-C	
Baseline Road (EW) - #6	TS	1	2	0	1	2	0	2	2	0	2	2	0	28.2-C	29.7-C	
Vineyard Avenue (NS) at:																
Foothill Boulevard (EW) - #7	TS	2	2	1	2	2	1	2	3	1	2	2	1	26.8-C	36.2-D	
Arrow Route (EW) - #8	TS	1	2	0	1	2	0	1	2	1	1	2	1	27.1-C	26.3-C	
Archibald Avenue (NS) at:																
SR-210 Freeway WB Ramps (EW) - #9	TS	2	2	0	0	2	1	0	0	0	1.3	0.3	1.3	18.0-B	15.2-B	
SR-210 Freeway EB Ramps (EW) - #10	TS	0	2	0	2	2	0	1.3	0.3	1.3	0	0	0	12.4-B	15.2-B	
19th Street (EW) - #11	TS	1	2	1	1	2	1	1	2	0	1	2	0	26.7-C	27.7-C	
Baseline Road (EW) - #12	TS	1	2	1>	1	2	1	1	2	1>	1	2	1	25.9-C	32.1-C	
Foothill Boulevard (EW) - #13	TS	1	2	0	1	2	1	2	2	1	2	2	1	25.8-C	31.1-C	
Arrow Route (EW) - #14	TS	1	2	1	1	2	0	1	2	1	1	2	1	28.6-C	27.7-C	
4th Street (EW) - #15	TS	1	2	0	1	2	1>	2	2	0	2	3	1>	28.3-C	31.5-C	
Haven Avenue (NS) at:																
SR-210 Freeway WB Ramps (EW) - #16	TS	2	3	0	0	3	1	0	0	0	1.3	0.3	1.3	15.1-B	16.3-B	
SR-210 Freeway EB Ramps (EW) - #17	TS	0	3	1	2	3	0	1.3	0.3	1.3	0	0	0	17.3-B	15.3-B	
Baseline Road (EW) - #18	TS	2	3	1	2	3	1>	1	2	1	1	2	1	28.7-C	34.3-C	
Foothill Boulevard (EW) - #19	TS	2	4	0	2	3	1	2	3	1	2	3	1	30.2-C	37.3-D	
Arrow Route (EW) - #20	TS	2	3	1>	2	3	0	2	2	1>	2	2	0	26.0-C	29.1-C	

¹ Source: The existing traffic volumes were obtained from the Year 2007/2008/2009 traffic counts provided by the City of Rancho Cucamonga.

² The lane decimals show the striping for shared lanes at the study area intersections. When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn

³ Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. movements sharing a single lane) are shown.

⁴ TS = Traffic Signal

Table 1 (Cont'd)

Existing Intersection Delay and Level of Service¹

Intersection	Traffic Control ⁴	Intersection Approach Lanes ²												Peak Hour Delay-LOS ³	
		Northbound			Southbound			Eastbound			Westbound			Morning	Evening
		L	T	R	L	T	R	L	T	R	L	T	R		
Milliken Avenue (NS) at:															
SR-210 Freeway WB Ramps (EW) - #21	TS	2	3	0	0	3	0	0	0	0	1.3	0.3	1.3	17.5-B	13.4-B
SR-210 Freeway EB Ramps (EW) - #22	TS	0	3	0	2	3	0	1.3	0.3	1.3	0	0	0	14.9-B	15.7-B
Baseline Road (EW) - #23	TS	2	3	1	2	3	1	2	3	1	2	3	1	27.6-C	31.0-C
Foothill Boulevard (EW) - #24	TS	2	4	1	2	3	1	2	3	1	2	3	1	28.9-C	35.1-D
Arrow Route (EW) - #25	TS	2	3	1	2	3	1	1	2	1	1	2	1	25.9-C	36.4-D
4th Street (EW) - #26	TS	2	4	1>	2	4	0	2	3	1	2	3	1	31.9-C	43.3-D
Rochester Avenue (NS) at:															
Arrow Route (EW) - #27	TS	1	2	1	1	2	1	1	2	0	2	2	1	23.7-C	31.4-C
Day Creek Boulevard (NS) at:															
SR-210 Freeway WB Ramps (EW) - #28	TS	2	3	0	0	3	1	0	0	0	1.3	0.3	1.3	17.4-B	14.8-B
SR-210 Freeway EB Ramps (EW) - #29	TS	0	2.5	1.5	2	3	0	1.3	0.3	1.3	0	0	0	14.2-B	15.9-B
Etiwanda Avenue (NS) at:															
Baseline Road (EW) - #30	TS	2	1	1>	1	2	0	1	3	0	2	2	0	26.3-C	25.4-C
Foothill Boulevard (EW) - #31	TS	1	1	0	1	2	0	2	3	1>	2	2	1	29.0-C	34.0-C
Arrow Route (EW) - #32	TS	1	1	0	1	1	1>	1	1	1	1	2	0	34.5-C	99.9-F ⁵
East Avenue (NS) at:															
Baseline Road (EW) - #33	TS	0.5	0.5	1	1	1	1>	1	2	1	1	2	1	63.4-E	46.5-D
I-15 Freeway SB Ramps (NS) at:															
Beech Avenue (EW) - #34	TS	0	0	0	1	0	1	1	2	0	0	2	0	16.1-B	12.0-B
Baseline Road (EW) - #35	TS	0	0	0	0.5	0.5	1	0	2	1	2	2	0	19.1-B	13.7-B
Foothill Boulevard (EW) - #36	TS	0	0	0	1.5	0	1.5	0	3	1>>	0	3	1>>	9.1-A	7.0-A
I-15 Freeway NB Ramps (NS) at:															
Beech Avenue (EW) - #37	TS	0	0	0	1	0	1	1	2	0	0	2	1	12.9-B	15.6-B
Baseline Road (EW) - #38	TS	1.3	0.3	1.3	0	0	0	1	3	0	0	2	1	13.4-B	18.1-B
Foothill Boulevard (EW) - #39	TS	1.5	0	1.5	0	0	0	0	3	1>>	0	3	1>>	11.4-B	13.0-B
Americana Way (NS) at:															
Baseline Road (EW) - #40	TS	1	1	0	1	1	1	1	3	1	1	3	1	21.4-C	22.4-C

¹ Source: The existing traffic volumes were obtained from the Year 2007/2008/2009 traffic counts provided by the City of Rancho Cucamonga.

² The lane decimals show the striping for shared lanes at the study area intersections. When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn

³ Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

⁴ TS = Traffic Signal

⁵ 99.9-F= Delay High, Intersection Unstable, Level of Service F.

Table 2

General Plan Land Use Comparison¹

Land Use	2001 Existing General Plan			2009 Proposed General Plan		
	Dwelling Units	Square Footage	Acreage	Dwelling Units	Square Footage	Acreage
Single-Family Detached Residential	34,035			39,980		
Multi-Family Attached Residential	21,579			23,280		
Retail		25,215,000			21,605,700	
Office		5,680,000			5,242,000	
Industrial		71,107,000			68,255,000	
Government			166			130
Schools			609			558
Total	55,614	102,002,000	775	63,260	95,102,700	688

¹ Source: Hogle-Ireland, Inc., 2009

Table 3

Traffic Generation Comparison¹

Land Use	Quantity	Units ²	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
<u>Trip Generation Rates³</u>									
Single-Family Detached Residential		DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Multi-Family Attached Residential		DU	0.07	0.37	0.44	0.35	0.17	0.52	5.81
Retail		TSF	0.61	0.39	1.00	1.83	1.90	3.73	42.94
Office		TSF	1.36	0.19	1.55	0.25	1.24	1.49	11.01
Industrial		TSF	0.69	0.15	0.84	0.18	0.68	0.86	6.96
<u>2001 Existing General Plan Trips Generated⁴</u>									
Single-Family Detached Residential	34,035	DU	6,467	19,060	25,527	21,782	12,593	34,375	325,715
Multi-Family Attached Residential	21,579	DU	1,511	7,984	9,495	7,553	3,668	11,221	125,374
Retail	25,215.000	TSF	15,381	9,834	25,215	46,143	47,909	94,052	1,082,732
Office	5,680.000	TSF	7,725	1,079	8,804	1,420	7,043	8,463	62,537
Industrial	71,107.000	TSF	49,064	10,666	59,730	12,799	48,353	61,152	494,905
Total			80,148	48,623	128,771	89,697	119,566	209,263	2,091,263
<u>2009 Proposed General Plan Trips Generated⁵</u>									
Single-Family Detached Residential	39,980	DU	7,596	22,389	29,985	25,587	14,793	40,380	382,609
Multi-Family Attached Residential	23,280	DU	1,630	8,614	10,244	8,148	3,958	12,106	135,257
Retail	21,605.700	TSF	13,179	8,426	21,605	39,538	41,051	80,589	927,749
Office	5,242.000	TSF	7,129	996	8,125	1,311	6,500	7,811	57,714
Industrial	68,255.000	TSF	47,096	10,238	57,334	12,286	46,413	58,699	475,055
Total			76,630	50,663	127,293	86,870	112,715	199,585	1,978,384
Difference⁶			-3,518	2,040	-1,478	-2,827	-6,851	-9,678	-112,879

² Source: See Table 2

² DU = Dwelling Units; TSF = Thousand Square Feet

³ Source: Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008, Land Use Categories 210, 230, 820, 710, and 130.

⁴ The 2001 existing General Plan includes 166 acres of government use and 609 acres of school use.

⁵ The 2009 proposed General Plan includes 130 acres of government use and 558 acres of school use.

⁶ The difference is "conservative" and does not include the reduction in government and school acreages which would reduce the trip generation due to lower coverage.

Table 4

Year 2030 Intersection Delay and Level of Service

Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Peak Hour Delay-LOS ²		
		Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
		L	T	R	L	T	R	L	T	R	L	T	R			
Grove Avenue (NS) at:																
Foothill Boulevard (EW) - #1		TS	1	1	1	1	2	1	1	2	1	1	2	0	22.1-C	22.2-C
Arrow Route (EW) - #2		TS	1	1	1	1	1	0	1	1	0	1	1	0	10.7-B	11.8-B
Carnelian Street (NS) at:																
SR-210 Freeway WB Ramps (EW) - #3		TS	2	2	0	0	2	0	0	0	0	1.3	0.3	1.3	18.7-B	16.1-B
SR-210 Freeway EB Ramps (EW) - #4		TS	0	2	0	2	2	0	1.3	0.3	1.3	0	0	0	11.6-B	19.5-B
19th Street (EW) - #5		TS	1	2	0	1	2	0	1	2	0	1	2	0	33.6-C	37.1-D
Baseline Road (EW) - #6		TS	1	2	0	1	2	0	2	2	0	2	2	0	31.1-C	55.0-D
Vineyard Avenue (NS) at:																
Foothill Boulevard (EW) - #7		TS	2	2	1	2	2	1	2	3	1	2	2	1	28.3-C	49.7-D
Arrow Route (EW) - #8		TS	1	2	0	1	2	0	1	2	1	1	2	1	30.6-C	35.6-D
Archibald Avenue (NS) at:																
SR-210 Freeway WB Ramps (EW) - #9		TS	2	2	0	0	2	1	0	0	0	1.3	0.3	1.3	18.6-B	15.8-B
SR-210 Freeway EB Ramps (EW) - #10		TS	0	2	0	2	2	0	1.3	0.3	1.3	0	0	0	13.2-B	15.7-B
19th Street (EW) - #11		TS	1	2	1	1	2	1	1	2	0	1	2	0	28.5-C	37.8-D
Baseline Road (EW) - #12		TS	1	2	1>	1	2	1	1	2	1>	1	2	1	27.1-C	53.6-D
Foothill Boulevard (EW) - #13		TS	1	2	0	1	2	1	2	2	1	2	2	1	29.5-C	43.2-D
Arrow Route (EW) - #14		TS	1	2	1	1	2	0	1	2	1	1	2	1	30.9-C	35.1-D
4th Street (EW) - #15		TS	1	2	0	1	2	1>	2	2	0	2	3	1>	34.4-C	37.4-D
Haven Avenue (NS) at:																
SR-210 Freeway WB Ramps (EW) - #16		TS	2	3	0	0	3	1	0	0	0	1.3	0.3	1.3	16.0-B	20.4-C
SR-210 Freeway EB Ramps (EW) - #17		TS	0	3	1	2	3	0	1.3	0.3	1.3	0	0	0	18.0-B	15.8-B
Baseline Road (EW) - #18		TS	2	3	1	2	3	1>	1	2	1	1	2	1	29.3-C	38.9-D
Foothill Boulevard (EW) - #19		TS	2	4	0	2	3	1	2	3	1	2	3	1	36.0-D	49.0-D
Arrow Route (EW) - #20		TS	2	3	1>	2	3	0	2	2	1>	2	2	0	31.0-C	38.1-D

¹ The lane decimals show the striping for shared lanes at the study area intersections. When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; 1 = Improvement

² Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. movements sharing a single lane) are shown.

³ TS = Traffic Signal

Table 4 (Cont'd)

Year 2030 Intersection Delay and Level of Service

Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Peak Hour Delay-LOS ²	
		Northbound			Southbound			Eastbound			Westbound			Morning	Evening
		L	T	R	L	T	R	L	T	R	L	T	R		
Milliken Avenue (NS) at:															
SR-210 Freeway WB Ramps (EW) - #21	TS	2	3	0	0	3	0	0	0	0	1.3	0.3	1.3	18.0-B	13.9-B
SR-210 Freeway EB Ramps (EW) - #22	TS	0	3	0	2	3	0	1.3	0.3	1.3	0	0	0	15.7-B	16.0-B
Baseline Road (EW) - #23	TS	2	3	1	2	3	1	2	3	1	2	3	1	29.4-C	33.2-C
Foothill Boulevard (EW) - #24	TS	2	4	1	2	3	1	2	3	1	2	3	1	33.5-C	40.7-D
Arrow Route (EW) - #25	TS	2	3	1	2	3	1	1	2	1	1	2	1	28.3-C	38.3-D
4th Street (EW) - #26	TS	2	4	1>	2	4	0	2	3	1	2	3	1	34.2-C	47.8-D
Rochester Avenue (NS) at:															
Arrow Route (EW) - #27															
- Without Improvements	TS	1	2	1	1	2	1	1	2	0	2	2	1	48.5-D	99.9-F ⁴
- With Improvements	TS	1	2	1>	1	2	1	2	2	0	2	2	1>	44.4-D	50.5-D
Day Creek Boulevard (NS) at:															
SR-210 Freeway WB Ramps (EW) - #28	TS	2	3	0	0	3	1	0	0	0	1.3	0.3	1.3	18.4-B	16.8-B
SR-210 Freeway EB Ramps (EW) - #29	TS	0	2.5	1.5	2	3	0	1.3	0.3	1.3	0	0	0	15.1-B	16.2-B
Etiwanda Avenue (NS) at:															
Baseline Road (EW) - #30	TS	2	1	1>	1	2	0	1	3	0	2	2	0	29.9-C	29.9-C
Foothill Boulevard (EW) - #31															
- Without Improvements	TS	1	1	0	1	2	0	2	3	1>	2	2	1	38.8-D	58.2-E
- With Improvements	TS	1	2	1	1	2	1	2	3	1	2	3	1	35.5-D	41.8-D
Arrow Route (EW) - #32															
- Without Improvements	TS	1	1	0	1	1	1>	1	1	1	1	2	0	99.9-F	99.9-F
- With Improvements	TS	1	2	1	1	2	1>	1	2	1	1	2	1	25.9-C	27.6-C
East Avenue (NS) at:															
Baseline Road (EW) - #33															
- Without Improvements	TS	0.5	0.5	1	1	1	1>	1	2	1	1	2	1	77.7-E	64.6-E
- With Improvements	TS	1	2	0	1	2	1	1	3	0	1	3	1	31.7-C	32.1-C
I-15 Freeway SB Ramps (NS) at:															
Beech Avenue (EW) - #34	TS	0	0	0	1	0	1	1	2	0	0	2	0	19.5-B	20.4-C
Baseline Road (EW) - #35	TS	0	0	0	0.5	0.5	1	0	2	1	2	2	0	22.6-C	14.3-B
Foothill Boulevard (EW) - #36	TS	0	0	0	1.5	0	1.5	0	3	1>>	0	3	1>>	9.7-A	7.5-A
I-15 Freeway NB Ramps (NS) at:															
Beech Avenue (EW) - #37	TS	0	0	0	1	0	1	1	2	0	0	2	1	18.9-B	33.6-C
Baseline Road (EW) - #38	TS	1.3	0.3	1.3	0	0	0	1	3	0	0	2	1	14.3-B	18.9-B
Foothill Boulevard (EW) - #39	TS	1.5	0	1.5	0	0	0	0	3	1>>	0	3	1>>	12.3-B	14.3-B
Americana Way (NS) at:															
Baseline Road (EW) - #40	TS	1	1	0	1	1	1	1	3	1	1	3	1	22.0-C	23.0-C

¹ The lane decimals show the striping for shared lanes at the study area intersections. When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

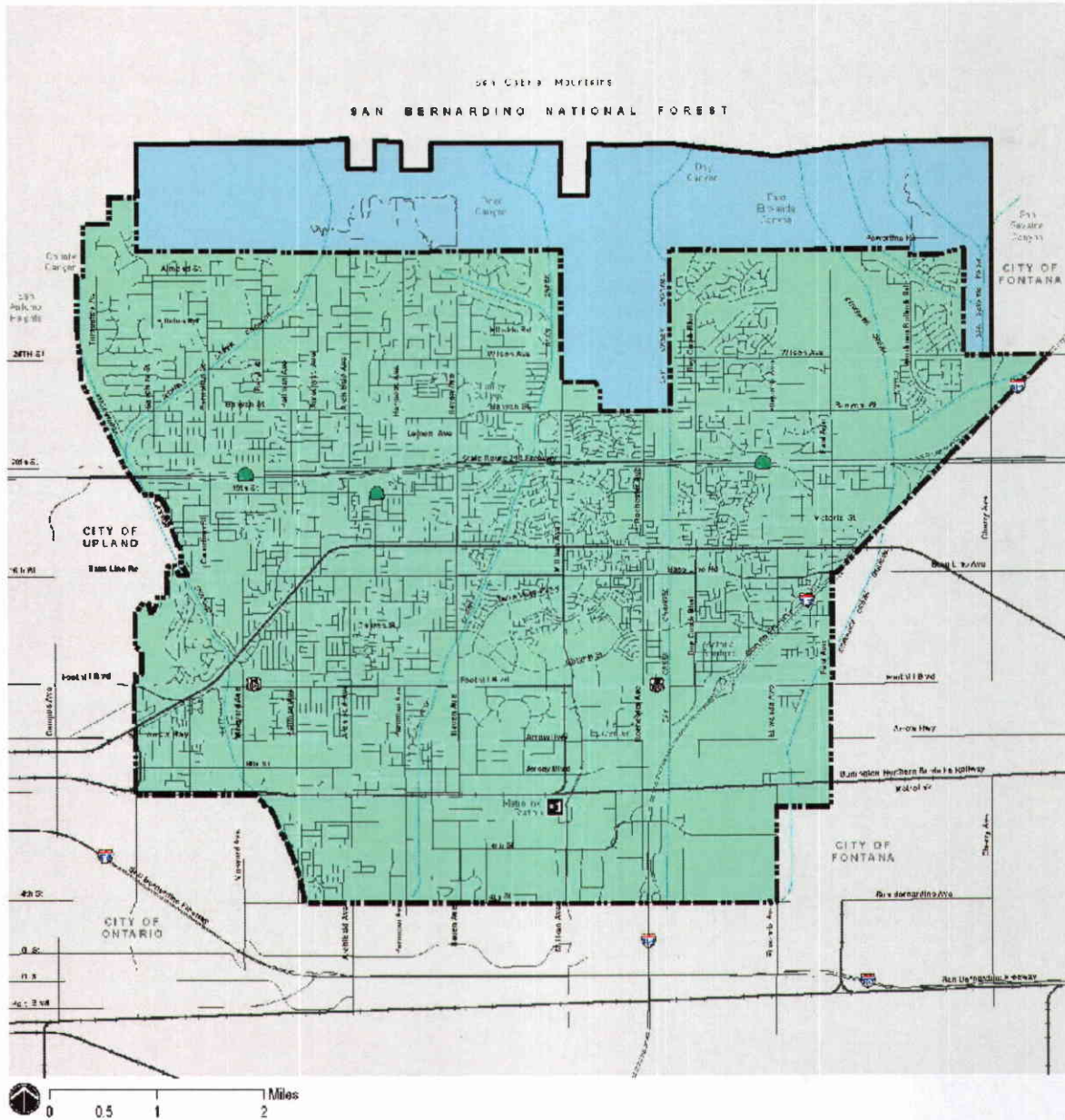
L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn; 1 = Improvement

² Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal

⁴ 99.9-F= Delay High, Intersection Unstable, Level of Service F.

Figure 1
Location Map



Legend

- Rancho Cucamonga City Boundary
- Sphere of Influence



Figure 2
Study Area Intersections



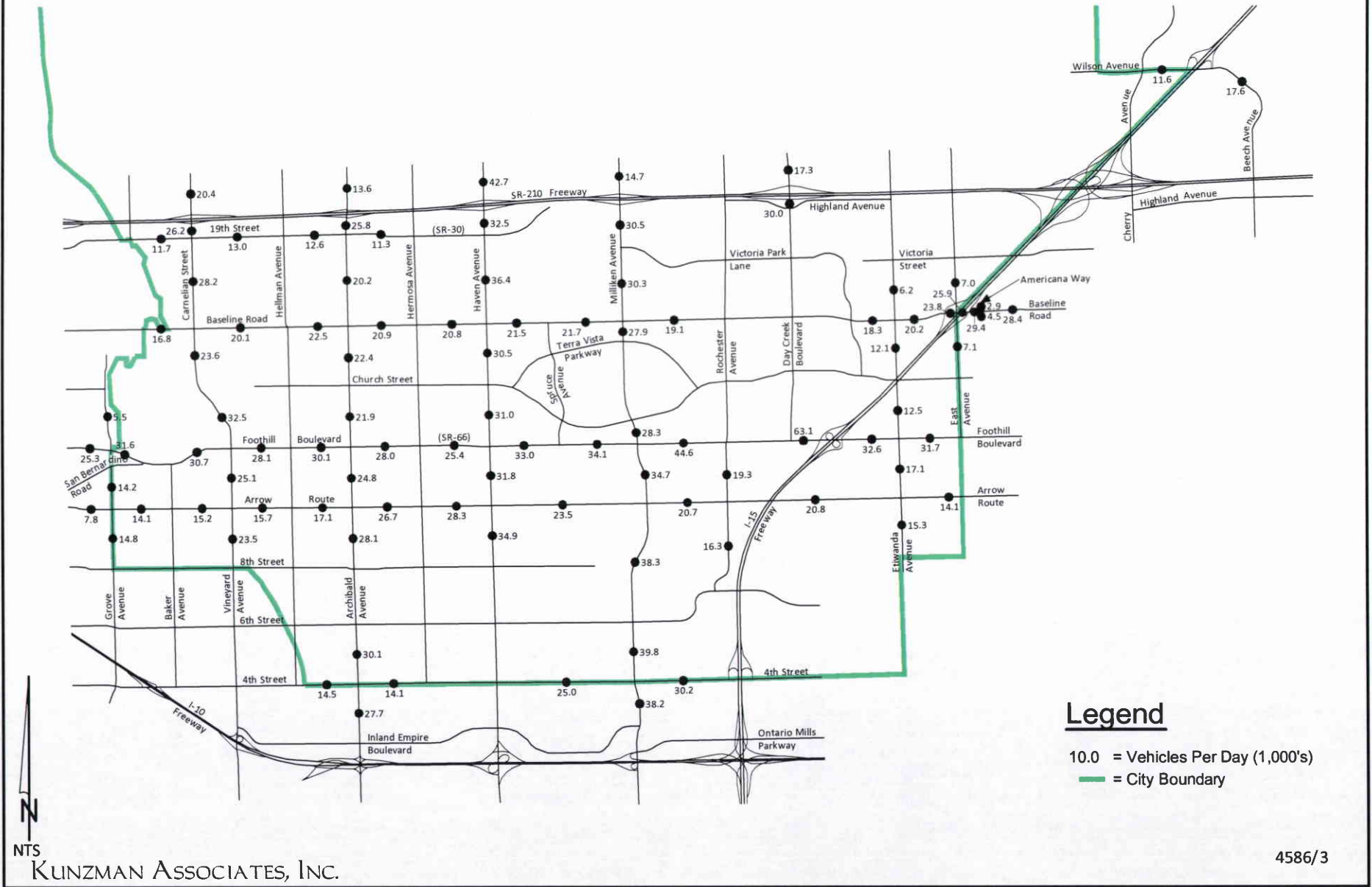
Legend

- ① = Study Area Intersection Number
- ⑥ = Congestion Management Program Intersection
- = City Boundary

15



Figure 3
Existing Average Daily Traffic Volumes



16

Figure 4 Existing Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

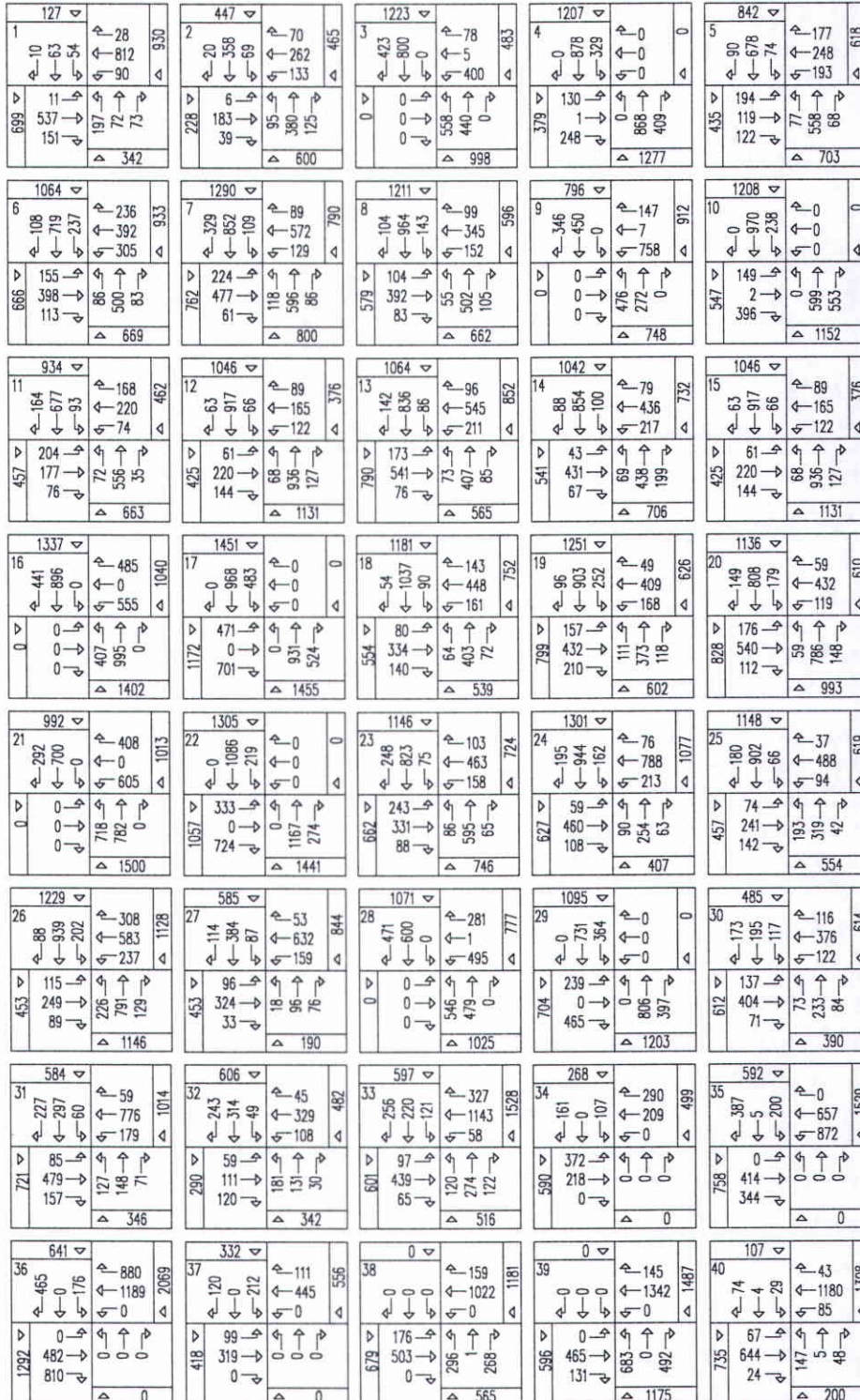


Figure 5 Existing Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

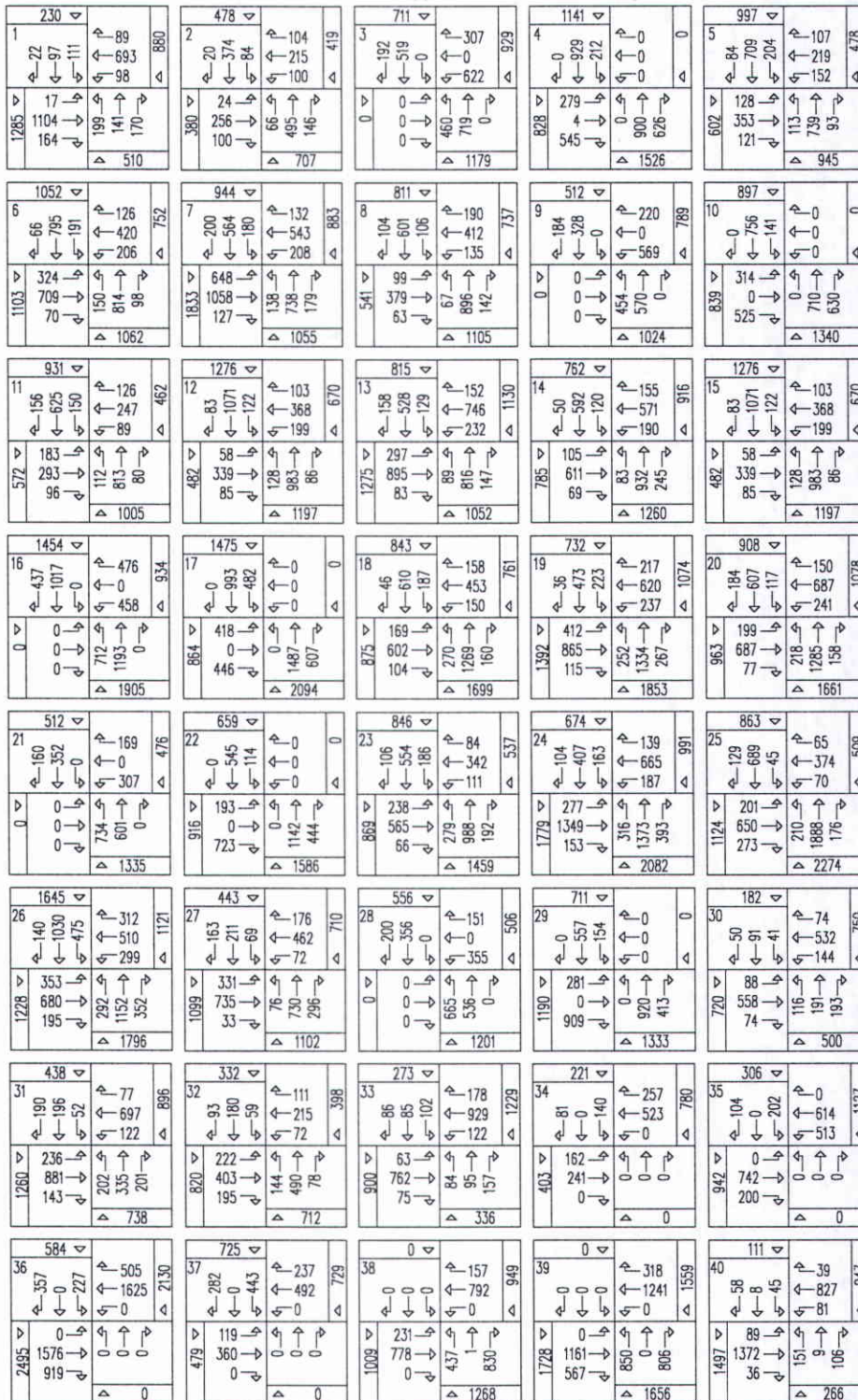


Figure 6 Existing Lane Geometrics

Intersection reference numbers are in upper left corner of turning movement boxes.

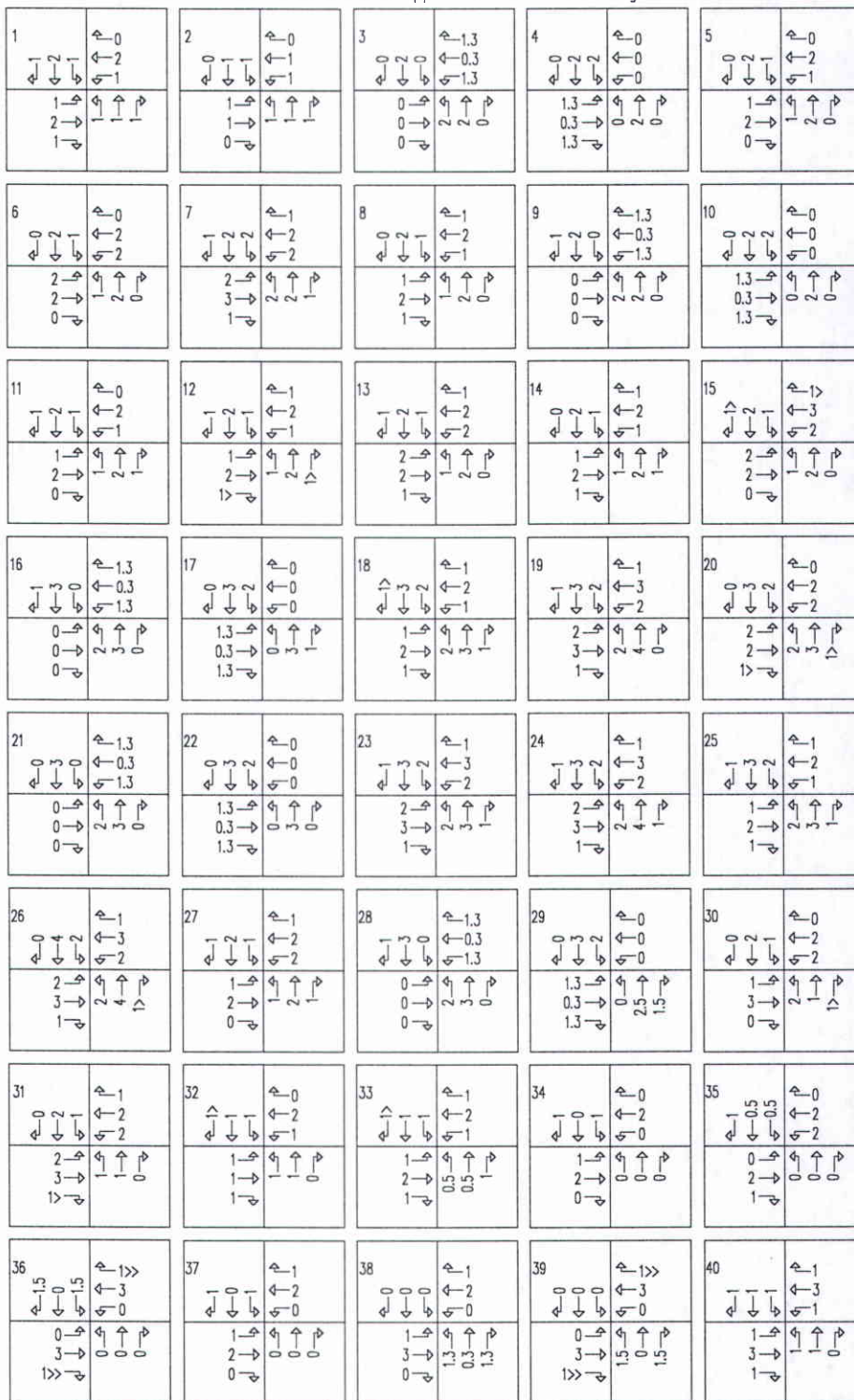
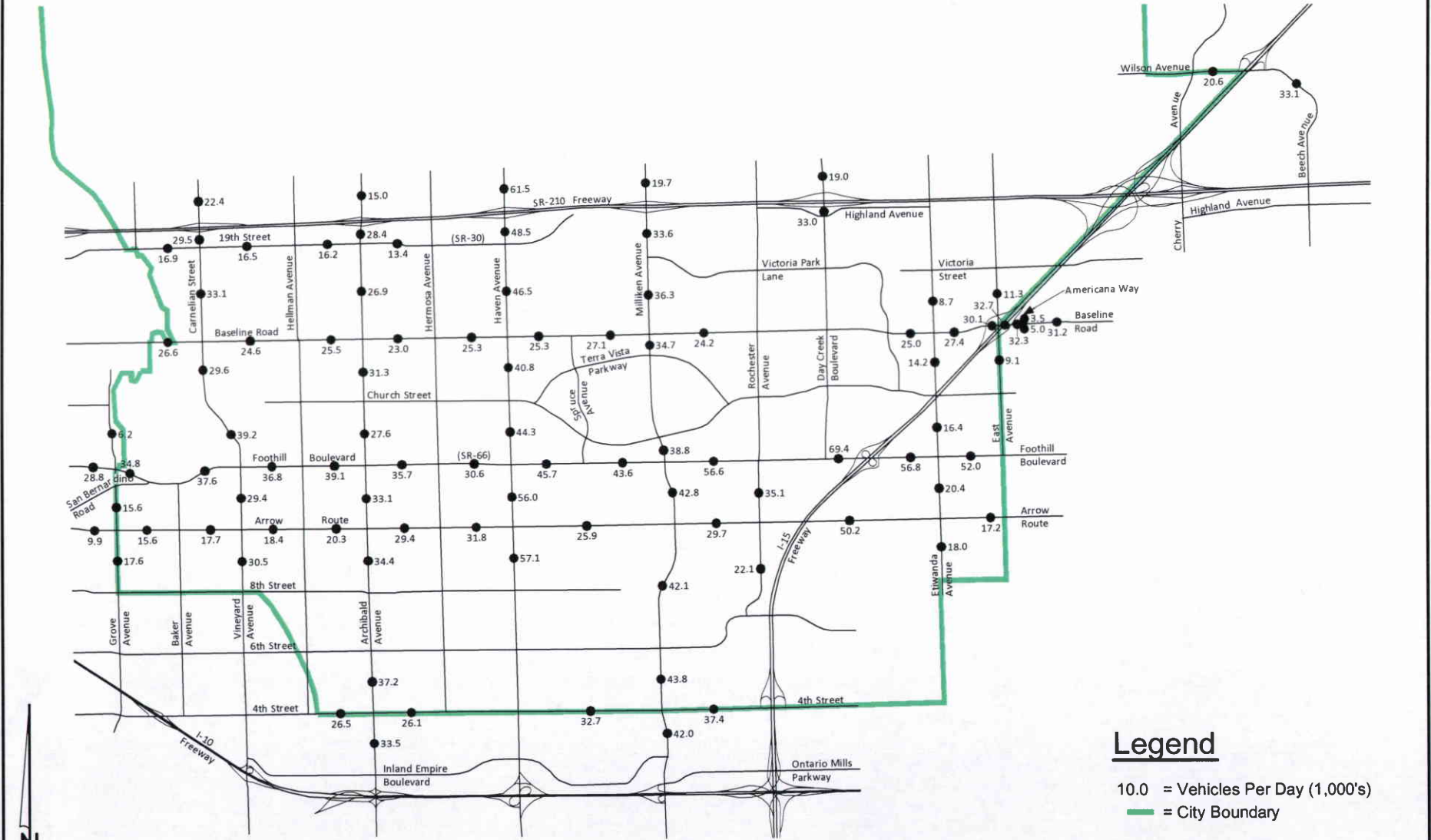


Figure 7
Year 2030 Average Daily Traffic Volumes



Legend
 10.0 = Vehicles Per Day (1,000's)
 — = City Boundary

20

Figure 8 Year 2030 Morning Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.

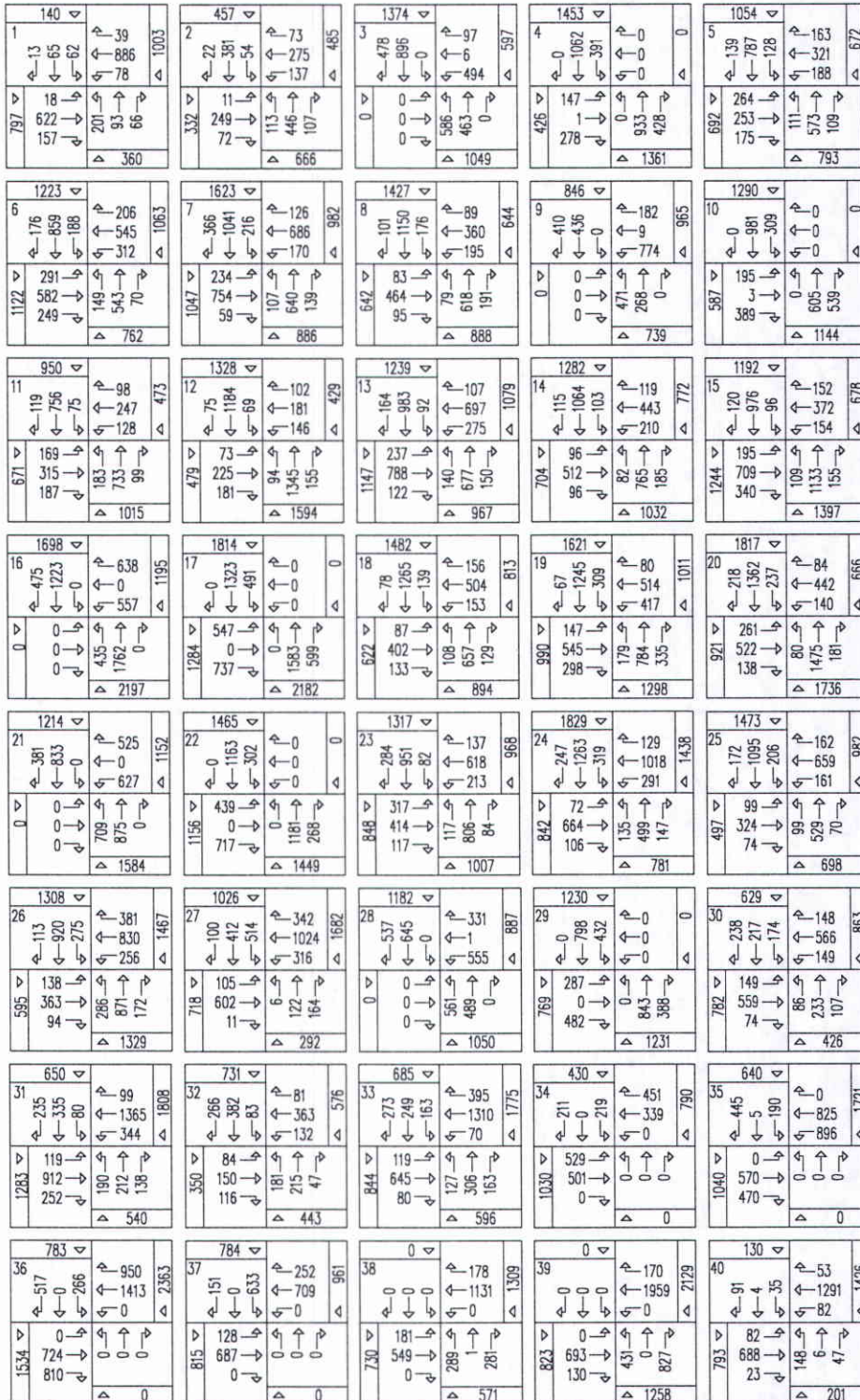
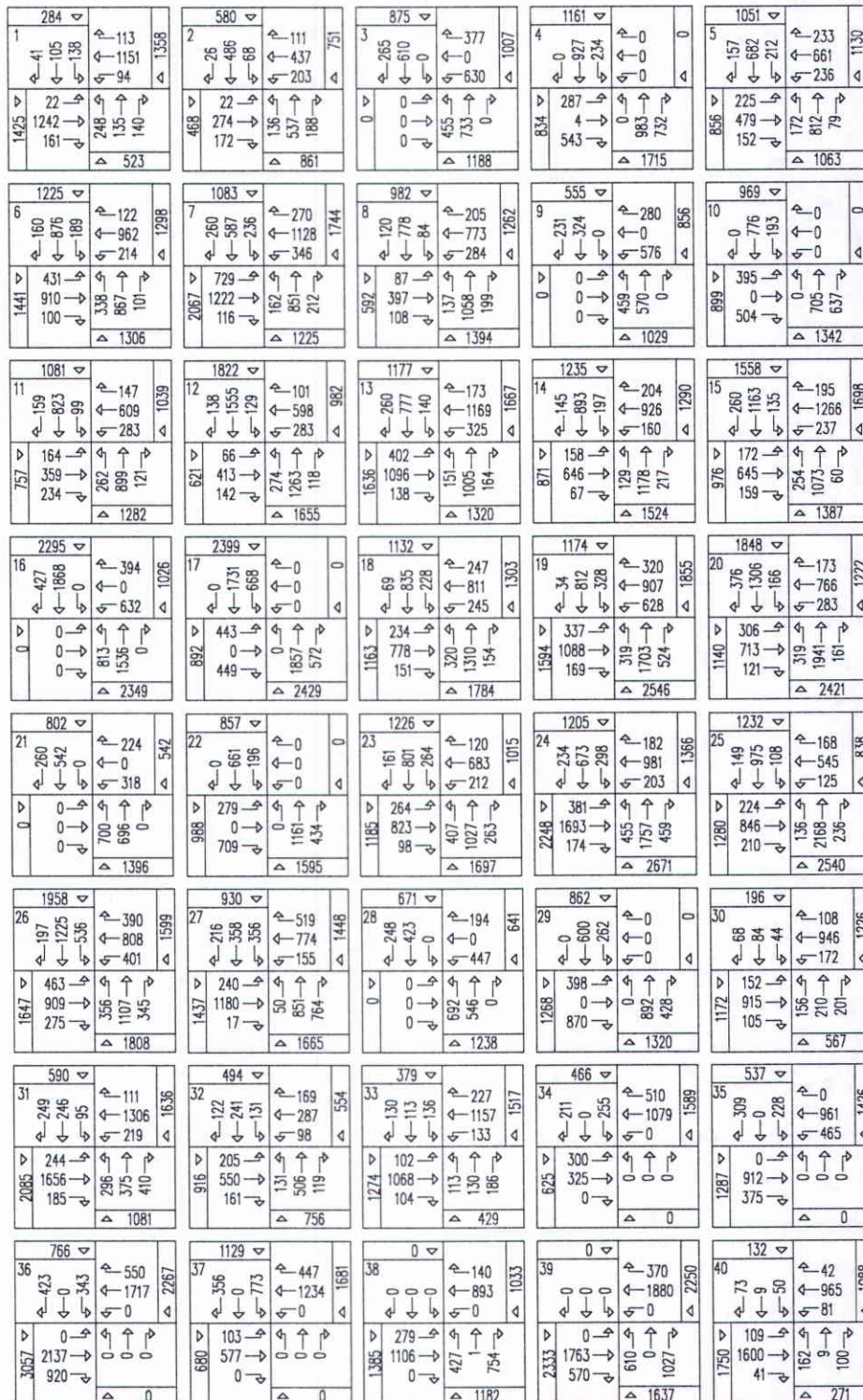


Figure 9

Year 2030 Evening Peak Hour Intersection Turning Movement Volumes

Intersection reference numbers are in upper left corner of turning movement boxes.



Appendix I

Letter from Cucamonga Valley Water District



Cucamonga Valley
Water District

CUCAMONGA VALLEY WATER DISTRICT

10440 Ashford Street • Rancho Cucamonga, CA 91729-0638
P.O. Box 638 • (909) 987-2591 • Fax (909) 476-8032

ROBERT A. DeLOACH
General Manager
Chief Executive Officer

January 4, 2010

Mr. James Troyer
Planning Director
CITY OF RANCHO CUCMAMONGA
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Re: Response to Rancho Cucamonga General Plan EIR SB 610 Compliance

Dear Mr. Troyer:

The Cucamonga Valley Water District (District) has reviewed your letter dated November 23, 2009 and the information you provided regarding the General Plan process being undertaken by the City of Rancho Cucamonga (City). As always, the District appreciates the opportunity to work with the City and looks forward to providing information that is useful to the City as part of its planning effort.

Based on the references in your letter to Water Code sections 10910 to 10915, it appears the City is requesting the District to prepare a Water Supply Assessment (WSA). However, the District is of the opinion that the City's General Plan process does not trigger the need to prepare a WSA at this time. The project description set forth in the Notice of Preparation (NOP) indicates that "the general plan expresses the community's development goals and embodies public policies relative to the distribution of future land uses" and that it "will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City." The NOP states that the General Plan project will authorize certain land use designations within the City and its sphere of influence. As such, it also appears from the NOP that the City, as part of its General Plan update, is not proposing or considering any land use approvals for any of the specific types of development projects identified in Water Code section 10912(a). Indeed, it appears from the NOP that no such development proposals are part of the project being analyzed as part of the City's environmental review process.

In preparing its General Plan update, the City should consider utilizing water supply information such as that set forth in the District's "2003 Water Supply Master Plan" and the 2005 Urban Water Management Plan" along with other information to reflect more recent developments affecting water supply conditions. Presently the District is preparing updates to both documents. The District's Water Master Plan update should be available in 2010 and the Urban Water Management Plan update is required by law to be complete by July 1, 2011. However, in an effort to assist the City with the completion of the City's 2010 General Plan, the District has agreed to provide a general statement regarding the status of the District's water supplies. Based on current analysis, it is anticipated that the District will be capable of meeting the water demands for the existing and future 20-year projected planned growth within the District's service area under normal, single-dry year and multiple-dry year conditions through imported water supplies from

Randall J Reed
President

Kathy Tiegs
Vice President

Oscar Gonzalez
Director

Henry L. "Hank" Stoy
Director

James V. Curatalo, Jr.
Director

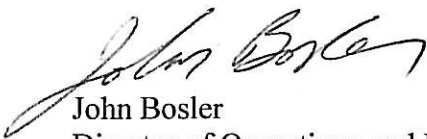
Metropolitan Water District of Southern California (MWD), as well as local surface and groundwater supplies and through recycling and water conservation.

As you are aware, the State of California and specifically the Southern California region is experiencing significant water supply reliability challenges associated with the convergence of several key factors including unseasonably low rainfall, critically dry conditions, and federally mandated environmental restrictions in the Sacramento-San Joaquin River Delta. As a result, water use efficiency and conservation have become a statewide priority and are recognized as vital components in meeting current and future water supply needs and reliability. In fact, the recently approved comprehensive water legislation package approved by the Governor includes mandates for a 20% water reduction by 2020. Pending legislation and the possibility of future statewide water restrictions pose additional challenges to the overall reliability of imported water supplies from MWD.

Although the District anticipates the availability of adequate water supplies to meet the City's planned growth, there are a number of factors, such as those set forth above, that may affect a portion of CVWD's water supply. As the City is aware, the District is aggressively responding to recent imported water shortage conditions. Among other actions, the District has adopted ordinances to increase water use efficiency and if necessary implement its Water Supply Shortage Contingency Plan. In addition, other measures will continue to be necessary and include the use of drought tolerant landscaping, water efficient fixtures and appliances, and other efforts to reduce per capita water demands, in part to help implement new state law requirements for water conservation.

The District looks forward to cooperating with the City and providing information that the City may request in preparing its water supply analysis for the General Plan project. Should you have any questions or concerns, please feel free to contact me.

Respectfully,



John Bosler
Director of Operations and Engineering Services



RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT RESPONSE TO COMMENTS SCH No. 2000061027



Prepared for | City of Rancho Cucamonga (Lead Agency)
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Contact: James R. Troyer, Planning Director

Prepared by | BonTerra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

Contact: Jennifer Marks, Project Manager

May 2010

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
Section 1.0	Introduction	1-1
Section 2.0	List of Respondents	2-1
Section 3.0	Responses to Environmental Comments	3-1
Section 4.0	Errata	4-1

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SECTION 1.0 INTRODUCTION

The purpose of this document is to present public comments and responses to comments received on Draft Program Environmental Impact Report (PEIR) (SCH #2000061027) for the Rancho Cucamonga 2010 General Plan Update. The Draft PEIR was released for public review and comment by the City of Rancho Cucamonga on February 16, 2010. The public review period ended on April 1, 2010.

In accordance with the California Environmental Quality Act (CEQA) Guidelines §15088, the City of Rancho Cucamonga, as the lead agency, has evaluated all substantive comments received on the Rancho Cucamonga 2010 General Plan Update Draft PEIR, and has prepared written responses to these comments. This document has been prepared in accordance with CEQA and represents the independent judgment of the lead agency.

The Final PEIR for the project consists of Draft PEIR and its technical appendices; the Responses to Comments included herein; other written documentation prepared during the PEIR process; the Mitigation Monitoring and Reporting Program (MMRP) and those documents which may be modified by the City Council at the time of certification. The City Council will also consider adoption of a Statement of Findings of Fact and a Statement of Overriding Considerations as part of the approval process for the proposed project.

This Response to Comments document is organized as follows:

Section 1 provides a brief introduction to this document.

Section 2 identifies the Draft PEIR respondents.

Section 3 provides responses to comments received on the Draft PEIR. Responses are provided in the form of individual responses to comment letters received. Comment letters are followed immediately by the responses to each letter.

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SECTION 2.0 LIST OF RESPONDENTS

In accordance with CEQA Guidelines §15132, the following is a list of persons, organizations, and public agencies that submitted comments on the Draft EIR received as of close of the public review period on April 1, 2010. Comments have been numbered and responses have been developed with corresponding numbers.

Letter No.	Respondent	Date of Correspondence	Page No.
State Agencies			
1	California Energy Commission	February 26, 2010.....	3-5
2	California Energy Commission	March 9, 2010.....	3-9
3	State Mining and Geology Board	March 18, 2010.....	3-13
4	Department of Toxic Substances Control	March 29, 2010.....	3-19
5	Department of Conservation	April 5, 2010.....	3-25
6	State Clearinghouse	April 7, 2010.....	3-29
County Agencies			
7	County of San Bernardino Department of Public Works	March 31, 2010.....	3-41
Special Districts/Regional Governments			
8	Metropolitan Water District of Southern California	March 10, 2010.....	3-47
9	Inland Empire Utilities Agency	March 15, 2010.....	3-51
10	City of Ontario	March 29, 2010.....	3-55
11	South Coast Air Quality Management District	April 1, 2010.....	3-61
Individuals			
12	Pacific Communities Builder, Inc.	March 3, 2010.....	3-71

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SECTION 3.0 RESPONSES TO ENVIRONMENTAL COMMENTS

This section includes responses to all substantive environmental issues raised in comments received on the Rancho Cucamonga 2010 General Plan Update Draft PEIR. Comments submitted on the Draft PEIR included questions about conclusions identified in the Draft PEIR; findings and methodology for preparation of the technical analyses; and comments about community and regional issues. The Final PEIR provides responses to comments on significant environmental points and does not respond to the comments on the merits of the project, nor does it attempt to resolve regional issues requiring full countywide input and consideration. When comments did not address the completeness or adequacy of the environmental documentation, or did not raise environmental issues, the receipt of the comment is noted; no further response is provided as CEQA does not require a response in these instances.

This section is formatted so that each comment letter is followed immediately by the corresponding responses.

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STATE AGENCIES

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STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

Letter 1



February 26, 2010

James Troyer
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Dear Mr. Troyer:

The California Energy Commission has received the City of Rancho Cucamonga's Notice of Availability of Draft Environmental Impact Report titled Rancho Cucamonga 2010 General Plan Update Project, SCH 2000061027 that was submitted on 2/22/2010 for comments due by 4/1/2010. After careful review, the Energy Commission has found the following:

We would like to assist in reducing the energy usage involved in your project. Please refer to the enclosed Appendix F of the California Environmental Quality Act for how to achieve energy conservation.

In addition, the Energy Commission's *Energy Aware Planning Guide* is also available as a tool to assist in your land use planning. For further information on how to utilize this guide, please visit www.energy.ca.gov/energy_aware_guide/index.html.

Thank you for providing us the opportunity to review/comment on your project. We hope that our comments will be helpful in your environmental review process.

If you have any further questions, please call Gigi Tien at (916) 651-0566.

Sincerely,

BILL PFANNER
Supervisor, Local Energy & Land Use Assistance Unit
Special Projects Office
Fuels and Transportation Division
California Energy Commission
1516 Ninth Street, MS 23
Sacramento, CA 95814

Enclosure

CITY OF RANCHO CUCAMONGA

MAR 01 2010

RECEIVED - PLANNING

1

CEQA: California Environmental Quality Act

Appendix F ENERGY CONSERVATION

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (1) decreasing overall per capita energy consumption,
- (2) decreasing reliance on natural gas and oil, and
- (3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, lifetime costs may be determined more by energy efficiency than by initial dollar costs.

II. EIR Contents

Potentially significant energy implications of a project should be considered in an EIR. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances, specific items may not apply or additional items may be needed.

A. Project Description may include the following items:

1. Energy consuming equipment and processes which will be used during construction, operation, and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.
2. Total energy requirements of the project by fuel type and end use.
3. Energy conservation equipment and design features.
4. Initial and life-cycle energy costs or supplies.
5. Total estimated daily trips to be generated by the project and the additional energy consumed per trip by mode.

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

C. Environmental Impacts may include:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, opera-

tion, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

D. Mitigation Measures may include:

1. Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.
2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy.
3. The potential for reducing peak energy demand.
4. Alternate fuels (particularly renewable ones) or energy systems.
5. Energy conservation which could result from recycling efforts.

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.

G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.

H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the energy costs over the lifetime of the project.

I. Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

Letter 1 California Energy Commission
Bill Pfanner, Supervisor, Local Energy & Land Use Assistance Unit
February 26, 2010

Response to Letter 1

1. Appendix F of the CEQA Guidelines describes the energy conservation information and analyses that should be included in an environmental impact report (EIR) and states that emphasis should be placed on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. For purposes of the 2010 General Plan Update Program EIR, energy efficiency was analyzed on a programmatic level due to the lack of a project-specific development proposal. Energy efficiency was discussed in terms of impacts to electricity and natural gas infrastructure (Draft Program EIR, Section 4.17, Utilities and Service Systems, pages 4.17-3, 4.17-15, and 4.17-21) as well as climate change impacts related to greenhouse gas emissions (Draft Program EIR Section 4.5, Climate Change).

Future development and redevelopment projects associated with buildout of the 2010 General Plan Update would result in increased demand for energy in the form of electricity and natural gas. The 2010 General Plan Update Resource Conservation Chapter sets forth goals and related policies intended to achieve reductions in energy use through implementation of efficiency measures, including encouraging alternative energy sources such as solar and wind energy (Policies RC-4.2 and RC-4.3) and photovoltaic street lighting (Policy RC-5.2). Additionally, the 2010 General Plan Update promotes the reduction of fuel consumption through transit-oriented development and replacing current City vehicles with new, alternative fuel vehicles on an as-needed basis (Policy RC-5.3).

In addition to implementing applicable goals and policies as stated in the 2010 General Plan Update related to energy efficiency, future development and redevelopment would be required to meet the service requirements of electricity and natural gas providers, which would ensure that a less than significant impact related to the provision of power would result (SC 4.17-4). Once the proposed 2010 General Plan Update is approved, future projects developed in the City of Rancho Cucamonga would also be required to comply with all State Energy Efficiency Standards and City codes in effect at the time of application and building permits (Program EIR, page 4.17-7). Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, and construction and the use of energy saving appliances, conditioning systems, water heating, and lighting. Because the future development and redevelopment associated with the 2010 General Plan Update would be required to adhere to standards contained in Title 24 in addition to requirements set forth by the respective utility providers, implementation of the 2010 General Plan Update would not result in the wasteful, inefficient, or unnecessary consumption of energy.

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CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

Letter 2



March 9, 2010

James Troyer
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Dear Mr. Troyer:

The California Energy Commission has received the City of Rancho Cucamonga's General Plan Update titled Rancho Cucamonga 2010 General Plan Update Project, SCH 2000061027 that was submitted on 2/17/2010 for comments due by 4/5/2010. After careful review, the Energy Commission has found the following:

We would like to assist in reducing the energy usage involved in your project. Please refer to the enclosed Appendix F of the California Environmental Quality Act for how to achieve energy conservation.

In addition, the Energy Commission's *Energy Aware Planning Guide* is also available as a tool to assist in your land use planning. For further information on how to utilize this guide, please visit www.energy.ca.gov/energy_aware_guide/index.html.

Thank you for providing us the opportunity to review/comment on your project. We hope that our comments will be helpful in your environmental review process.

If you have any further questions, please call Gigi Tien at (916) 651-0566.

Sincerely,

BILL PFANNER
Supervisor, Local Energy & Land Use Assistance Unit
Special Projects Office
Fuels and Transportation Division
California Energy Commission
1516 Ninth Street, MS 23
Sacramento, CA 95814

Enclosure

CITY OF RANCHO CUCAMONGA

MAR 15 2010

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CEQA: California Environmental Quality Act

Appendix F ENERGY CONSERVATION

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (1) decreasing overall per capita energy consumption,
- (2) decreasing reliance on natural gas and oil, and
- (3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, lifetime costs may be determined more by energy efficiency than by initial dollar costs.

II. EIR Contents

Potentially significant energy implications of a project should be considered in an EIR. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances, specific items may not apply or additional items may be needed.

A. Project Description may include the following items:

1. Energy consuming equipment and processes which will be used during construction, operation, and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.
2. Total energy requirements of the project by fuel type and end use.
3. Energy conservation equipment and design features.
4. Initial and life-cycle energy costs or supplies.
5. Total estimated daily trips to be generated by the project and the additional energy consumed per trip by mode.

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

C. Environmental Impacts may include:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, opera-

tion, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

D. Mitigation Measures may include:

1. Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.
2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy.
3. The potential for reducing peak energy demand.
4. Alternate fuels (particularly renewable ones) or energy systems.
5. Energy conservation which could result from recycling efforts.

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.

G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.

H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the energy costs over the lifetime of the project.


I. Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

Letter 2 California Energy Commission
Bill Pfanner, Supervisor, Local Energy & Land Use Assistance Unit
March 9, 2010

Response to Letter 2

1. This letter is a duplicate of Letter 1. Please refer to the Response to Letter 1.

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STATE OF CALIFORNIA, NATURAL RESOURCES AGENCY		ARNOLD SCHWARZENEGGER, GOVERNOR
	Letter 3 STATE MINING AND GEOLOGY BOARD DEPARTMENT OF CONSERVATION 801 K Street • Suite 2015 • Sacramento, California 95814	
PHONE: 916 / 322-1082 • FAX: 916 / 445-0738 • TDD: 916 / 324-2555 • INTERNET: conservation.ca.gov/smgb		
ERIN D. GARNER, CHAIR CHARLIE WYATT, VICE CHAIR	BRIAN BACA JOHN LANE BENJAMIN LICARI	KATHY LUND BARBARA LUNDBURG ROBERT TEPEL

March 18, 2010

VIA REGULAR MAIL

CITY OF RANCHO CUCAMONGA

Mr. James Troyer
Planning Director
City of Rancho Cucamonga Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

MAR 24 2010

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Re: Comment on Draft Resource Conservation Element, Mineral Resource Management Policies Amendments, City of Rancho Cucamonga, San Bernardino County

Dear Mr. Troyer:

On behalf of the State Mining and Geology Board (SMGB), I am pleased to have the opportunity to review the Draft Resource Conservation Element for the City of Rancho Cucamonga, County of San Bernardino, dated February 2010, which incorporates the City's Mineral Resource Management Policies (MRMP).

Mineral Resource Management Policies (MRMP)

The purpose and intent of the MRMP are to ensure the continued availability of important mineral resources, while regulating surface mining operations as required by the Surface Mining and Reclamation Act (SMARA) of 1975 (Public Resources Code Section 2710, et seq.), and the State Mining and Geology Board's (SMGB) regulations. When drafts MRMP are received for review, they are examined for **Content**, **Clarity**, and **Conflict**. The review is conducted by the Executive Officer. If necessary, additional technical and legal advice may be sought from the California Geological Survey (CGS) or from the Attorney General's Office.

Content: MRMPs are examined to determine if all SMARA requirements are addressed and contained.

Clarity: Contents of the MRMPs are examined to determine if they are clearly stated or might be construed in more than one way, which might lead to later confusion.

Conflict: Contents are examined to determine that they are not in conflict with statute, nor are in conflict internally with other portions of the MRMPs.

Mission of the State Mining and Geology Board is to Represent the State's Interest in the Development, Utilization and Conservation of Mineral Resources; Reclamation of Mined Lands; Development of Geologic and Seismic Hazard Information; and to Provide a Forum for Public Redress

Mr. James Troyer
March 18, 2010
Page 2

The Staff Review offers two types of review comments: **Recommendations** and **Suggestions**. These comments are not binding and are offered as a constructive service.

Recommendations are comments that should be followed if the MRMP are to be acceptable to the SMGB. These recommendations relate to serious omissions in content or statements in conflict with SMARA or the SMGB's Regulations.

Suggestions are comments that are made to improve the clarity of statements, usually by making them more complete or by offering references.

General Comments

As required pursuant to Public Resources Code Sections 2762 and 2763, MRMP within General Plans need to address the justification for the loss of mineral resources within its jurisdiction. The Notice, however, provides inadequate justification, since it fails to consider the importance of these minerals to their County's area of jurisdiction. Prior to proceeding with this proposed project, it is strongly recommended that the General Plan address the justification for the loss of this mineral resource as required by State law under PRC Sections 2762 and 2763.

The potential loss of available, permitted aggregate resources from the mineral resource areas may have a strong deleterious effect on the City and San Bernardino County area. In its most recent and comprehensive study of *Aggregate Availability in California (2006), Map Sheet 52*, CGS has found that only about 24 percent of the projected construction aggregate demand over the next 50 years for the areas will be met by currently permitted resources. This is a significant shortfall in construction grade aggregate resource availability, and represents a sharp downward trend from the 37 percent availability in 2002.

To assist the City in addressing these issues, CGS recently published Special Report 206 titled "*Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption Region, Los Angeles and San Bernardino Counties, California.*" The SMGB based on recommendations from the State Geologist and public input, prioritizes areas to be classified and/or designated, and accepted this report at its December 11, 2008, regular business meeting. CGS Special Report 206 updated information previously presented in a classification report on Portland cement concrete-grade (PCC) aggregate in the San Bernardino Production-Consumption (P-C) Region first published in 1984. The previous report was published by the California Division of Mines and Geology (CDMG; now CGS) as Special Report 143, Part VII (SR 143, Part VII) – *Mineral Land Classification of the Greater Los Angeles Area, Part VII, Classification of Sand and Gravel Resources Areas, San Bernardino Production-Consumption Region.*

As you may be aware, the State Mining and Geology Board (SMGB), along with the California Geological Survey (CGS), work closely to establish policy for the conservation and development of mineral resources throughout the state. Absence of emphasis on the protection of such resources sidesteps the impending exhaustion of permitted aggregate reserves in the City's near-term future.

1

Mr. James Troyer
March 18, 2010
Page 3

Specific Comments

The following specific comments are offered:

Page RC8. Second paragraph under *Mineral Resources Areas*: It is stated on page RC8 that “*The CGS has calculated the Claremont-Upland Production-Consumption Region will require 300 million tons of construction aggregate to fulfill local building demands through the year 2056.*” The 50-year projected need of “300-million tons” provided in this section is from Map 52, which is now out-of-date since publication of Special Report 202 titled “*Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption Region, Los Angeles and San Bernardino Counties, California.*” The updated 50-year projection for construction aggregate is actually on the order of 240 million tons.

2

Page RC8. Second paragraph under *Mineral Resources Areas*: It is also stated in this paragraph that “*Current reserves in the Region, including property owned or leased for which permission for extraction has been granted, totals approximately 537.9 million tons.*” This statement seems to use the term “reserves” to mean “resources.” Also, 537,9 million tons is neither an aggregate “reserve” of “resource” figure from any of the published CGS’s reports. Special Report 202 provides the aggregate “reserves” for the Region calculated to be 121 million tons, and the “resources” calculated to be 451 million tons.

3

Page RC12. Third paragraph under *Mineral Resources Areas*: This section states “*The City [Rancho Cucamonga] has determined that urban uses shall have priority over aggregate recovery in areas not already disturbed by such activities.*” This statement is in disagreement to the response of the City as required by the SMGB pursuant to SMARA. The City of Rancho Cucamonga has several unmined aggregate resource areas that have been designated by the SMGB within the City and its sphere of Influence. These areas “*...shall be included as a part of the state policy..., and the specific goals and policies to protect against the premature incompatible development of the area.*” Furthermore, Public Resources Code Section 2790 requires the City to adopt mineral policies in its General Plan that emphasize the conservation and development of identified mineral deposits. For example, the City could consider, at minimum, the following:

4

Goal No. 1: Encourage the responsible mining of local deposits of construction aggregate consistent with the Surface Mining and Reclamation Act of 1975.

Goal No. 2: Protect those mineral deposits designated to be regionally significant by the SMGB through appropriate zoning and buffering from incompatible adjacent land uses.

Goal No. 3: Permit a sufficient volume of local construction aggregate reserves to meet the projected 50-year demand of the population of western San Diego County.

-oOo-

Mr. James Troyer
March 18, 2010
Page 4

As you continue your process of revision and come to a point where you have a complete document ready for the approval of your Board of Supervisors, that document should be resubmitted to the SMGB's office in Sacramento for final review prior to a recommendation that it is in compliance with the SMARA and the SMGB's regulations. The MRMP could then be formally recognized by the SMGB at the first regular business meeting scheduled after receipt of that document.

Thank you for the opportunity to provide input into the City of Rancho Cucamonga's revised MRMP in the Draft Resource Conservation Element within the February 2010 Draft General Plan. We ultimately look forward to the receipt and review of a complete document that addresses the suggestions indicated above.

The SMGB appreciates the opportunity to review and provide comments on the Draft General Plan, and would appreciate being included on future notices concerning this matter. Should you have any questions regarding the contents of this correspondence, or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,



Stephen M. Testa
Executive Officer

cc: Dr. John G. Parrish, State Geologist and Director of the California Geological Survey (CGS)
John Clinkenbeard, Supervising Engineering Geologist, CGS
Rick Thalhammer, Deputy Attorney General
Rebecca Salazar, Department of Conservation
James Pierce, Department of Conservation

Letter 3 State Mining and Geology Board
 Stephen M. Testa, Executive Officer
 March 18, 2010

Response to Letter 2

1. Pages 4.11-6 and 4.11-7 of the Draft Program EIR analyze impacts related to the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. As stated in the Draft Program EIR, it is acknowledged that development pursuant to the 2010 General Plan Update would preclude mining operations within specific areas of the City designated for future development or adjacent to future development. This impact, as well as the cumulative impact related to loss of mineral resources, is identified as significant and unavoidable, although several 2010 General Plan Update policies from the draft Resource Conservation Element are identified to protect aggregate mineral resources while allowing continued development within the City of Rancho Cucamonga. Specifically and as stated on page 4.11-8 and 4.11-9 of the Draft Program EIR, Goal RC-7 calls for the protection of aggregate mining resources and is supported by “policies to consider the value of the resources prior to approval of development (Policy RC-7.1), to minimize impacts on adjacent sensitive uses (Policy RC-7.2), to allow for future restoration of mined lands (Policy RC-7.3), to terminate designation of areas suitable for urban uses (Policy RC-7.4), and to include the presence of aggregate resources into property titles (Policy RC-7.5).” Compliance with these policies demonstrates the intended protection of mineral resources. Per 2010 General Plan Update policies, mining operations will continue to be an allowable use until such time that a development proposal is received and reviewed by the City. At such time, available options include allowing for mining operations to continue or to allow for such activities to be replaced by urban development. As stated on page 4.11-7 of the Draft Program EIR, “the City is expected to balance the need for local mineral resources with building over these resources”.
2. The commenter noted that an updated 50-year projection for construction aggregate is currently available. The updated projection is approximately 60 million tons less than what was identified in the 2010 General Plan Update. For purposes of discussion and analysis, using the larger projection represents a more conservative analysis approach. Therefore, any analysis based on the more conservative number identified in the 2010 General Plan Update would represent a worst-case scenario and the actual situation would be better than discussed in the 2010 General Plan Update. The data in the 2010 General Plan Update has been revised to reflect more recent data available from the State Mining and Geology Board. This revision does not render the existing Program EIR analysis inadequate or legally indefensible.
3. The reference on page 4.11-3 of the Draft Program EIR to the 2010 General Plan Update figure of 537.9 million tons of aggregate resources within the Claremont-Upland and San Bernardino Production-Consumption regions has no bearing on the analysis contained in the EIR. This potential inconsistency does not render the Program EIR inadequate or legally indefensible.
4. Refer to Response 1, above.

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Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
5796 Corporate Avenue
Cypress, California 90630

Letter 4



Arnold Schwarzenegger
Governor

March 29, 2010

Mr. James Troyer
City of Rancho Cucamonga Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730

NOTICE OF COMPLETION AND A DRAFT ENVIRONMENTAL IMPACT REPORT
(EIR) FOR RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE PROJECT
(SCH # 2000061027)

Dear Mr. Troyer:

The Department of Toxic Substances Control (DTSC) has received your submitted EIR document for the above-mentioned project. As stated in your document: "A general plan expresses the community's development goals and embodies public policies relative to the distribution of future land uses, both public and private. The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City.

The proposed General Plan Update will address six of the seven State-mandated General Plan elements and other issues that is important to the community. The proposed General Plan Update contains the following elements (referred to as "Chapters"):

Managing Land Use, Community Design, Historic Resources, and Public Art
Community Mobility
Economic Development
Community Services
Resource Conservation
Public Facilities and Infrastructure
Public Health and Safety

CITY OF RANCHO CUCAMONGA

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Mr. James Troyer
March 29, 2010
Page 2

Summaries of the content and purpose of each of the chapters are provided below. The City is currently updating its General Plan Housing Element; however, this update is independent of this General Plan Update process”.

Based on the review of the submitted document DTSC has comments as follows:

1. The draft EIR needs to identify and determine whether current or historic uses in the Project area have resulted in any release of hazardous wastes/substances. } 1
2. The draft EIR should evaluate whether conditions at any sites in the Project Area pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
 - National Priorities List (NPL): A list is maintained by the United States Environmental Protection Agency (U.S.EPA).
 - CalSites: A Database primarily used by the California Department of Toxic Substances Control.
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
 - Local County and City maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.} 2
3. Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, } 3

Mr. James Troyer
March 29, 2010
Page 3

have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

} 3
cont.

4. If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

} 4

5. DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

} 5

If you have any questions regarding this letter, please contact me at (714) 484-5472 or at ashami@DTSC.ca.gov.

Sincerely,



Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

Mr. James Troyer
March 29, 2010
Page 4

cc: CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
Adelacr1@dtsc.ca.gov

CEQA # 2816

Letter 4 Department of Toxic Substances Control

Al Shami, Project Manager
March 29, 2010

Response to Letter 2

1. As discussed in the Draft Program EIR (pages 4.8-17 through 4.8-19), Laguna Geosciences performed a database search in 2009 as part of the Special Studies – Hazardous Materials Analysis. According to this report, 46 facilities were identified as having a high potential for, or known release of, hazardous substances into the ground, groundwater, or surface waters. However, as additionally stated in the Draft Program EIR, compliance with standard conditions related to the Hazardous Materials Transportation Act (SC 4.8-1), the Resource Conservation and Recovery Act (SC 4.8-2), the California Hazardous Waste Control Act (SC 4.8-3), the California Accidental Release Prevention Program (SC 4.8-5), and any regulations set forth by the San Bernardino County Fire Department (SCs 4.8-3 and 4.8-4) would ensure that future development on or near any of these sites would not pose a significant threat to human health or the environment.
2. As discussed above, a database search was prepared for the 2010 General Plan Update Study Area which is included as Appendix F to the Draft Program EIR. As noted in Section 4.1 of Appendix F, the environmental database search included the databases of all the regulatory agencies cited in the comment letter, in addition to several other databases.
3. As discussed in Response 1, above, future development and redevelopment projects would be required to comply with all applicable federal, State, and local regulations related to hazardous materials. In addition to the above, the Draft Program EIR states that future projects must comply with (1) the *California Code of Regulations* (Title 8, Section 1532.2) related to the removal of lead-based paint or other materials containing lead and (2) the *California Health and Safety Code* (Section 39650 et seq.) and the *California Code of Regulations* (Title 8, Section 1529) related to asbestos emissions and asbestos-related demolition or construction activities. Because the Draft Program EIR includes a program-level analysis, it is expected that individual development and redevelopment applications and the need for additional environmental analysis would be evaluated on a project-by-project basis. A health risk assessment may need to be prepared if it is deemed necessary or appropriate based on the individual project application.
4. As stated in the Draft PEIR on pages 4.8-6 and 4.8-13 (SC 4.8-3), future development and redevelopment shall comply with the California Hazardous Waste Control Act. In addition to compliance with this regulation, all future development and redevelopment projects will comply with all applicable federal, State, and local regulations related to hazardous wastes, including those set forth by the San Bernardino County Fire Department, acting as the Certified Unified Program Agency.
5. The commenter provided a contact related to future guidance for cleanup oversight. Comment is noted.

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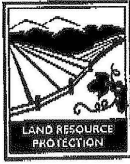
From-DIVISION OF LAND RESOURCE PROTECTION

19163273430

T-163 P.001/002 F-332

NATURAL RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR



DEPARTMENT OF CONSERVATION

Letter 5

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2566 • WEBSITE conservation.ca.gov

April 5, 2010

CITY OF RANCHO CUCAMONGA

VIA FACSIMILE (909) 477-2848

James Troyer, AICP
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91729

APR 07 2010

RECEIVED - PLANNING

Dear Mr. Troyer:

Subject: City of Rancho Cucamonga 2010 General Plan Update Draft
Environmental Impact Report - SCH# 2000061027

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Draft Environmental Impact Report (DEIR) for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation Williamson (Williamson) Act and other agricultural land conservation programs. We offer the following comments and recommendations with respect to the project's impacts on agricultural land and resources.

Project Description:

The purpose of the City of Rancho Cucamonga (City) 2010 General Plan Update project is the comprehensive revision of the General Plan document. The City is located in southwestern San Bernardino County. There are no lands under Williamson Act contracts in the City. However, build-out of the 2010 General Plan Update Study Area would convert 196.26 acres of Important Farmland to non-agricultural uses. Therefore, the Division recommends that any subsequent CEQA document address the following item to provide a comprehensive discussion of potential impacts of the project on agricultural land and activities.

Mitigation Measures

The loss of agricultural land represents a permanent reduction in the State's agricultural land resources. As such, the Department recommends the use of permanent agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land. If growth inducing or cumulative agricultural impacts are involved, the Department recommends that this ratio of conservation easements to lost agricultural land be increased.

} 1

The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable, and efficient use of California's energy, land, and mineral resources.

Apr-05-2010 14:23

From-DIVISION OF LAND RESOURCE PROTECTION

19163273430

T-163 P.002/002 F-332

Mr. James Troyer
April 5, 2010
Page 2 of 2

Conservation easements will protect a portion of those remaining land resources and lessen project impacts in accordance with CEQA Guideline section 15370. The Department highlights this measure because of its acceptance and use by lead agencies as an appropriate mitigation measure under CEQA and because it follows an established rationale similar to that of wildlife habitat mitigation.

Mitigation via agricultural conservation easements can be implemented by at least two alternative approaches: the outright purchase of easements or the donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. The conversion of agricultural land should be deemed an impact of at least regional significance. Hence the search for replacement lands should be conducted regionally or statewide, and not limited strictly to lands within the project's surrounding area.

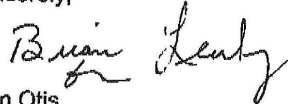
The Department also has available a listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. This compilation report may be requested from the Division at the email address or phone number below. General information about agricultural conservation easements, the Williamson Act, and provisions noted above is available on the Department's website:

<http://www.conservation.ca.gov/dlrp/index.htm>

Of course, the use of conservation easements is only one form of mitigation that should be considered. Any other feasible mitigation measures should also be considered.

Thank you for giving us the opportunity to comment on this DEIR. If you have questions regarding our comments, or require technical assistance or information on agricultural land conservation, please contact Elliott Lum, Environmental Planner, at 801 K Street, MS 18-01, Sacramento, CA 95814; phone: (916) 324-0869; email: Elliott.Lum@conservation.ca.gov.

Sincerely,



Dan Otis
Program Manager
Williamson Act Program

cc: State Clearinghouse

1
cont.

Letter 5 Department of Conservation
Dan Otis, Program Manager
April 5, 2010

Responses to Letter 3

1. As stated on page 4.2-7 of the Draft Program EIR, “future development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland to non-agricultural uses”. In order to reduce the significance of this impact, a new mitigation measure has been added to the Draft Program EIR. However, it should be noted that despite the addition of MM 4.2-1 (identified below), the level of significance would continue to be significant and unavoidable. The following revisions to the text have been made to the Draft PEIR. ~~**Bold, strikeout text**~~ is used to show deleted wording and **bold, italic text** is used to show wording that has been added.

Page 1-9, Table ES-1

SECTION 4.2 – AGRICULTURAL RESOURCES		
<p>Farmland Resources Future Development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses.</p>	<p>No measures are identified. MM 4.2-1 <i>Should a future project propose to develop designated Important Farmlands (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and/or Farmland of Local Importance) pursuant to the current Farmland Mapping and Monitoring Program map, the Project Applicant shall implement measure(s) to reduce impacts related to the loss of farmland to the satisfaction of the Planning Director. Feasible mitigation measures may include, but not be limited to, the 1) purchase of land within a permanent agricultural conservation easement, as approved by the Planning Director, of at least equal quality and size as partial compensation for the direct loss of agricultural land; 2) donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements; or 3) direct conservation of a portion of designated Important Farmlands on the future project site. Should a project contribute to growth-inducing or cumulative impacts related to the loss of agricultural land, adequate compensation values in the form of permanent agricultural conservation easements shall be evaluated on a project-specific basis.</i></p>	<p>Significant and Unavoidable.</p>

Page 4.2-6, Fifth Paragraph

Since the existing vineyards are small, scattered operations that do not support any larger-scale agricultural uses and since they represent less than one percent of the total Important Farmland in the County, their conversion to urban land uses is not expected to have a major impact on the County’s crop value. However, future development associated with buildout of the proposed 2010 General Plan

Update pursuant to the proposed Land Use Plan (refer to Exhibit 3-3 in Section 3.0, Project Description) would result in the conversion of these farmland areas to non-agricultural uses, thus creating a significant impact. ***Implementation of MM 4.2-1 would reduce impacts related to conversion of farmlands; however, the impact would remain significant and unavoidable. There are no feasible mitigation measures to address this impact under the proposed land use plan; therefore, buildout of the proposed 2010 General Plan Update would result in a significant and unavoidable impact related to the conversion of farmland.***

Page 4.2-7, Second Paragraph

Impact 4.2a Future development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses. ***Implementation of MM 4.2-1 would reduce impacts related to conversion of farmlands; however, the impact would remain significant and unavoidable. No mitigation is available under the proposed land use plan; therefore, this loss of farmland would result in a significant and unavoidable impact.***

Page 4.2-8, Subsection 4.2.8

4.2.8 MITIGATION MEASURES

~~No mitigation measures are available to reduce the identified impacts to agricultural resources.~~

MM 4.2-1 Should a future project propose to develop designated Important Farmlands (Prime Farmland, Farmland of Statewide Importance, Unique Farmland and/or Farmland of Local Importance) pursuant to the current Farmland Mapping and Monitoring Program map, the project applicant shall implement measure(s) to reduce impacts related to the loss of farmland to the satisfaction of the Planning Director. Feasible mitigation measures may include, but not be limited to, the 1) purchase of land within a permanent agricultural conservation easement, as approved by the Planning Director, of at least equal quality and size as partial compensation for the direct loss of agricultural land; 2) donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements; or 3) direct conservation of a portion of designated Important Farmlands on the future project site. Should a project contribute to growth inducing or cumulative impacts related to the loss of agricultural land, adequate compensation values in the form of permanent agricultural conservation easements shall be evaluated on a project-specific basis.

4/7/2010 16:09

STATE CLEARINGHOUSE

P.001/008



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA

Letter 6



Cynthia Bryant
Director

Governor's Office of Planning and Research
State Clearinghouse

Facsimile Transmittal

Date: 4-7-10

Fax Number: 909-477-2847

CITY OF RANCHO CUCAMONGA

To: JAMES TROYER

APR 07 2010

From: LAUREN GILMORE

RECEIVED - PLANNING

Instructions: per your request.

State Clearinghouse Fax: 916-323-3018

Number of Pages
Including cover sheet

9

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

APR-07-2010 16:09

STATE CLEARINGHOUSE

P.002/008



ARNOLD SCHWARZENEGGER
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT
DIRECTOR

April 7, 2010

James Troyer
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91729

Subject: Rancho Cucamonga 2010 General Plan Update
SCH#: 2000061027

Dear James Troyer:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on April 5, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

APR-07-2010 16:10

STATE CLEARINGHOUSE

P.003/008

Form A

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2000061027

Project Title: **Rancho Cucamonga 2010 General Plan Update**

Lead Agency: **City of Rancho Cucamonga** Contact Person: **James Troyer**
Street Address: **10500 Civic Center Drive** Phone: **(909) 477-2750**
City: **Rancho Cucamonga** Zip: **91729** County: **San Bernardino**

Project Location: **City of Rancho Cucamonga is located in the Inland Empire in southwest San Bernardino County.**
County: **San Bernardino** City/Nearest Community: **Rancho Cucamonga** Total Acres: **24,442**

Cross Streets: _____ Zip Code: **91730**
Assessor's Parcel No.: **various** Section: _____ Trp: _____ Range: _____ Base: _____

Within 2 Miles: State Hwy. #: **I-15, SR-210** Waterways: **Day Creek, Deer Creek, Etiwanda Creek**
Airports: **LA/Ontario** Railways: **BNSF** Schools: **various**

Document Type:

- CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Conc Supplement to EIR (Note prior to 3/1/00) Final Document
 Neg Dec Subsequent EIR (Note prior to 3/1/00) Draft EIS Other: _____
 M/Neg Dec Other: _____ FONSI

Local Action Type:

- General Plan Update Specific Plan Rezoning
 General Plan Amendment Master Plan Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (subdivision, etc.) Other: _____

Development Type:

- Residential: Units _____ Acres _____ Employees _____ Water Facilities: Type _____ MGD
 Office: Sq.ft. _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Power: Type _____ MW
 Educational _____ Waste Treatment: Type _____ MGD
 Recreational _____ Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:

- Aesthetics/Visual Fiscal Recreation/Traffic Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archaeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Coastal Zone Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Drainage/Absorption Noise Solid Waste Land Use
 Economic/Job Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Public Services/Facilities Traffic/Circulation Other: **GHG**

Present Land Use/Zoning/General Plan Designation:

The City is currently an urbanizing community with zoning and land uses consistent with the 2001 General Plan.

Project Description: (please use a separate page if necessary)

The proposed 2010 General Plan Update is a comprehensive revision of the General Plan document which addresses six of the seven State-mandates General Plan elements with the Housing Element to be updated as a separate, stand-alone document.

State Clearinghouse Contact: (916) 445-0613 **SL**

State Review Begins: **2.17** - 2010

SCH COMPLIANCE **4.5** - 2010

Please note State Clearinghouse Number (SCH#) on all Comments

2000061027

SCH#: _____
Please forward late comments directly to the Lead Agency

AQMD/APCD **33120**

(Resources: **2, 20**)

Project Sent to the following State Agencies

- | | |
|--|--|
| <input checked="" type="checkbox"/> Resources | State/Consumer Svcs |
| <input type="checkbox"/> Boating & Waterways | General Services |
| <input type="checkbox"/> Coastal Comm | Cal EPA |
| <input type="checkbox"/> Colorado Rvr Bd | ARB - Airport Projects |
| <input checked="" type="checkbox"/> Conservation | ARB - Transportation Projects |
| <input checked="" type="checkbox"/> Fish & Game # 6 | ARB - Major Industrial Projects |
| <input type="checkbox"/> Delta Protection Comm | Resources, Recycling and Recovery |
| <input type="checkbox"/> Cal Fire | SWRCB: Div. Financial Assist. |
| <input checked="" type="checkbox"/> Historic Preservation | SWRCB: Wtr Quality |
| <input checked="" type="checkbox"/> Parks & Rec | SWRCB: Wtr Rights |
| <input type="checkbox"/> Central Valley Flood Prof. | <input checked="" type="checkbox"/> Reg. WQCB # 5 |
| <input type="checkbox"/> Bay Cons & Dev Comm | <input checked="" type="checkbox"/> Toxic Sub Ctrl-CTC |
| <input checked="" type="checkbox"/> DWR | Yth/Adlt Corrections |
| <input checked="" type="checkbox"/> Cal EMA | Corrections |
| <input type="checkbox"/> Bus Transp Hous | Independent Comm |
| <input checked="" type="checkbox"/> Aeronautics | Energy Commission |
| <input checked="" type="checkbox"/> CHP | <input checked="" type="checkbox"/> NAHC |
| <input checked="" type="checkbox"/> Caltrans # 8 | Public Utilities Comm |
| <input type="checkbox"/> Trans Planning | State Lands Comm |
| <input checked="" type="checkbox"/> Housing & Com Dev | Tahoe Rgl Plan Agency |
| <input type="checkbox"/> Food & Agriculture | |
| <input type="checkbox"/> Health Services | |
| | Conservancy |
| | Other: _____ |

APR-07-2010 16:10

STATE CLEARINGHOUSE

P.004/008

NATURAL RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR



DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

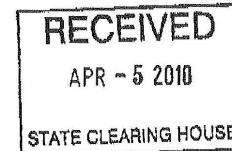
PHONE 916 / 324-0650 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

April 5, 2010

VIA FACSIMILE (909) 477-2848

James Troyer, AICP
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91729

*Clear
4-5-10
e*



Dear Mr. Troyer:

Subject: City of Rancho Cucamonga 2010 General Plan Update Draft
Environmental Impact Report - SCH# 2000061027

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Draft Environmental Impact Report (DEIR) for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation Williamson (Williamson) Act and other agricultural land conservation programs. We offer the following comments and recommendations with respect to the project's impacts on agricultural land and resources.

Project Description:

The purpose of the City of Rancho Cucamonga (City) 2010 General Plan Update project is the comprehensive revision of the General Plan document. The City is located in southwestern San Bernardino County. There are no lands under Williamson Act contracts in the City. However, build-out of the 2010 General Plan Update Study Area would convert 198.26 acres of Important Farmland to non-agricultural uses. Therefore, the Division recommends that any subsequent CEQA document address the following item to provide a comprehensive discussion of potential impacts of the project on agricultural land and activities.

Mitigation Measures

The loss of agricultural land represents a permanent reduction in the State's agricultural land resources. As such, the Department recommends the use of permanent agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land. If growth inducing or cumulative agricultural impacts are involved, the Department recommends that this ratio of conservation easements to lost agricultural land be increased.

The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable, and efficient use of California's energy, land, and mineral resources.

APR-07-2010 16:11

STATE CLEARINGHOUSE
DIVISION OF LAND RESOURCE PROTECTION

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P.005/008
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Mr. James Troyer
April 5, 2010
Page 2 of 2

Conservation easements will protect a portion of those remaining land resources and lessen project impacts in accordance with CEQA Guideline section 15370. The Department highlights this measure because of its acceptance and use by lead agencies as an appropriate mitigation measure under CEQA and because it follows an established rationale similar to that of wildlife habitat mitigation.

Mitigation via agricultural conservation easements can be implemented by at least two alternative approaches: the outright purchase of easements or the donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. The conversion of agricultural land should be deemed an impact of at least regional significance. Hence the search for replacement lands should be conducted regionally or statewide, and not limited strictly to lands within the project's surrounding area.

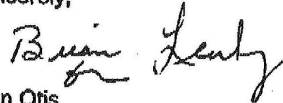
The Department also has available a listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. This compilation report may be requested from the Division at the email address or phone number below. General information about agricultural conservation easements, the Williamson Act, and provisions noted above is available on the Department's website:

<http://www.conservation.ca.gov/dlrp/index.htm>

Of course, the use of conservation easements is only one form of mitigation that should be considered. Any other feasible mitigation measures should also be considered.

Thank you for giving us the opportunity to comment on this DEIR. If you have questions regarding our comments, or require technical assistance or information on agricultural land conservation, please contact Elliott Lum, Environmental Planner, at 801 K Street, MS 18-01, Sacramento, CA 95814; phone: (916) 324-0869; email: Elliott.Lum@conservation.ca.gov.

Sincerely,



Dan Otis
Program Manager
Williamson Act Program

cc: State Clearinghouse

APR-07-2010 16:11

STATE CLEARINGHOUSE

P.006/008



Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

March 29, 2010

*Clear
4.5.10
e*



Mr. James Troyer
City of Rancho Cucamonga Planning Department
10500 Civic Center Drive
Rancho Cucamonga, California 91730

NOTICE OF COMPLETION AND A DRAFT ENVIRONMENTAL IMPACT REPORT
(EIR) FOR RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE PROJECT
(SCH # 2000061027)

Dear Mr. Troyer:

The Department of Toxic Substances Control (DTSC) has received your submitted EIR document for the above-mentioned project. As stated in your document: "A general plan expresses the community's development goals and embodies public policies relative to the distribution of future land uses, both public and private. The Rancho Cucamonga General Plan Update proposes to establish the overall development capacity for the City and its Sphere of Influence and will serve as a long-range policy document for determining the appropriate look, feel, and experience of the City.

The proposed General Plan Update will address six of the seven State-mandated General Plan elements and other issues that is important to the community. The proposed General Plan Update contains the following elements (referred to as "Chapters"):

Managing Land Use, Community Design, Historic Resources, and Public Art
Community Mobility
Economic Development
Community Services
Resource Conservation
Public Facilities and Infrastructure
Public Health and Safety

♻️ Printed on Recycled Paper

Mr. James Troyer
March 29, 2010
Page 2

Summaries of the content and purpose of each of the chapters are provided below. The City is currently updating its General Plan Housing Element; however, this update is independent of this General Plan Update process".

Based on the review of the submitted document DTSC has comments as follows:

1. The draft EIR needs to identify and determine whether current or historic uses in the Project area have resulted in any release of hazardous wastes/substances.
2. The draft EIR should evaluate whether conditions at any sites in the Project Area pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
 - National Priorities List (NPL): A list is maintained by the United States Environmental Protection Agency (U.S.EPA).
 - CalSites: A Database primarily used by the California Department of Toxic Substances Control.
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
 - Local County and City maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
3. Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are,

APR-07-2010 16:12

STATE CLEARINGHOUSE

P.008/008

Mr. James Troyer
March 29, 2010
Page 4

cc: CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 J Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
Adelacr1@dtsc.ca.gov

CEQA # 2816

TOTAL P.008

Letter 6 State Clearinghouse
 Scott Morgan, Acting Director
 April 7, 2010

Responses to Letter 6

1. The State Clearinghouse acknowledged receipt of the Draft Program EIR and the close of the comment period. Enclosed letters include Department of Toxic Substances Control and Department of Conservation, both of which are addressed separately (Comment Letters 4 and 5, respectively).

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COUNTY AGENCIES

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DEPARTMENT OF PUBLIC WORKS
FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION

Letter 7
COUNTY OF SAN BERNARDINO

825 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130



GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.
Director of Public Works

March 31, 2010

CITY OF RANCHO CUCAMONGA

File: 10(ENV)-4.01

APR 05 2010

City of Rancho Cucamonga
Planning Department
Attn: James Troyer, Planning Director
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

RECEIVED - PLANNING

RE: DRAFT PROGRAM EIR FOR THE RANCHO CUCAMONGA 2010 GENERAL PLAN UPDATE PROJECT (SCH #2000061027)

Dear Mr. Troyer:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project.

Environmental Management Division (Brandy Wood, Ecological Resource Specialist, (909) 387-7971):

Page 4.4-28 (first paragraph) states, "The City shall continue to work with the County of San Bernardino, the CDFG, and the USFWS to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains that will become part of a larger Multiple Species Habitat Conservation Plan (MSHCP) for the County of San Bernardino." } 1

The County of San Bernardino does not have an MSHCP, nor are there plans to prepare one at this time.

If you have any questions or require additional information, please contact the specific Division that provided the comment, as listed above.

Sincerely,

NARESH P. VARMA, P.E., Chief
Environmental Management Division

NPV:LM:mb/CEQA Comments to DEIR Rancho Cucamonga 2010 General Plan Update.doc

cc: Linda Mawby
GMB/ARI Reading File

GREGORY C. DEVEREAUX
County Administrative Officer

Board of Supervisors
BRAD MITZELFELT First District NEIL DERRY Third District
PAUL BIANE Second District GARY C. OVITT Fourth District
JOSIE GONZALES Fifth District

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Letter 7 County of San Bernardino Department of Public Works

Naresh P. Varma, P.E., Chief
March 31, 2010

Responses to Letter

1. It is acknowledged that there are no plans to prepare a Multiple Species Habitat Conservation Plan for the County of San Bernardino. Accordingly, the following revision to the text in the first paragraph on page 4.4-28 of the Draft Program EIR has been made. ~~**Bold, strikeout text**~~ is used to show deleted wording and ***bold, italic text*** is used to show wording that has been added.

Additionally, Policy RC-8.3 requires the City to utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas. The City shall continue to work with the County of San Bernardino, the CDFG, and the USFWS to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains ~~that will become part of a larger Multiple Species Habitat Conservation Plan (MSHCP) for the County of San Bernardino.~~

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SPECIAL DISTRICTS/REGIONAL GOVERNMENTS

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Letter 8

From: De Leon, Rebecca A <rdeleon@mwdh2o.com>
To: Troyer, James
Sent: Wed Mar 10 11:01:17 2010
Subject: Rancho Cucamonga 2010 General Plan Update Project

Hello Mr. Troyer,

Notice of Preparation of Draft Environmental Impact Report for the Rancho Cucamonga 2010 General Plan Update Project

Thank you for your letter regarding your Rancho Cucamonga 2010 General Plan Update Project in the city of Rancho Cucamonga.

We reviewed the notice and documentation and determined the proposed Project is not regionally significant to The Metropolitan Water District of Southern California (Metropolitan). Metropolitan does not own or operate any facilities or maintain real estate entitlements within the footprint of the proposed Project; however, we support increased water conservation efforts and encourage projects to include water conservation measures such as using water efficient fixtures, drought-tolerant landscaping, and use of recycled water to offset increases in water use. Additional information on water conservation measures is available on Metropolitan's website at www.bewaterwise.com.

} 1

Should there be a change in the scope of the Project, we would appreciate the opportunity to review and comment at that time. If we can be of further assistance, please contact Mrs. Rebecca De Leon at (213) 217-6337.

Thank you.

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Letter 8 Metropolitan Water District of Southern California
Rebecca De Leon
March 10, 2010

Response to Letter 6

1. Metropolitan Water District of Southern California (MWD) acknowledged its receipt of the Draft Program EIR and identified that the project is not regionally significant to MWD and has no comments at this time. As stated on page 4.17-18 of the Draft Program EIR, future development and redevelopment projects would be supportive of water conservation efforts through compliance with the 2010 General Plan Update Goals RC-2 and RC-3 and associated policies which aim to increase water conservation, increase groundwater availability (reducing dependence on imported water) and reduce demand for potable water by utilizing more recycled water resources.

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6075 Kimball Ave, • Chino, CA 91708
P.O. Box 9020 • Chino, Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 597-8875
www.ieua.org

Letter 9

CITY OF RANCHO CUCAMONGA

MAR 16 2010

RECEIVED - PLANNING

March 15, 2010

Mr. James Troyer, Planning Director
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

Subject: Notice of Availability of the Rancho Cucamonga 2010 General Plan Update
Project Draft Program EIR

Dear Mr. Troyer,

The Inland Empire Utilities Agency (IEUA) Planning Department has reviewed the above referenced subject and has the following comments/recommendations:

- The projects are located farther than 0.5 miles to existing IEUA Recycled Water Lines, but within distance of a future IEUA Recycled Water Lines. We recommend that, if it is consistent with the City's Planning and CVWD, you should consider use of recycled water in these developments. } 1
- It appears that the developments will provide wastewater flow to existing IEUA sewer lines, consistent with IEUA's Sewer Master Plan. Please continue to notify IEUA of any additional connections to our Regional Sewer System. } 2
- IEUA is currently developing its 2010 Urban Water Management Plan (UWMP). As part of the 2010 UWMP, IEUA is using water and wastewater projections from each of its member agencies, including Cucamonga Valley Water District (CVWD). After comparing CVWD's projections and the City's projections, we noticed some differences. It would be helpful if the City could compare its projections with CVWD's and let IEUA know which projections are appropriate. } 3

If you have any questions, please feel free to contact me at (909) 993-1635 or by email at rshaw@ieua.org.

Regards,

Ryan Shaw
Inland Empire Utilities Agency

Fifty-Five Years of Excellence in Water Resources & Quality Management

Terry Catlin
President

Angel Santiago
Vice President

Michael E. Camacho
Secretary/Treasurer

Gene Koopman
Director

John L. Anderson
Director

Richard W. Atwater
Chief Executive Officer
General Manager

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Letter 9 Inland Empire Utilities Agency
 Ryan Shaw
 March 15, 2010

Response to Letter 7

1. As stated on page 4.17-18 of the Draft Program EIR, the 2010 General Plan Update contains goals and policies that address increasing use of recycled water resources in an effort to decrease reliance on potable water resources. Specifically, Policy RC-3.3 calls for supporting “efforts to expand the recycled water distribution system and actively promote the widespread use of recycled water in Rancho Cucamonga” (Draft Program EIR, page 4.17-12). As future development and redevelopment applications are considered, the City will encourage use of recycled water, as appropriate, in compliance with this policy.
2. As discussed in Section 4.17, Utilities and Service Systems of the Draft EIR, wastewater will continue to flow through and be treated at the Inland Empire Utilities Agency (IEUA) facilities. As future development and redevelopment applications are considered, the City will continue to coordinate with the IEUA to ensure adequate capacity is available to serve future projects.
3. In response to the comment regarding water and wastewater projects, the City of Rancho Cucamonga will contact and cooperate with the IEUA to provide all appropriate water and wastewater projections for use in the IEUA’s future planning documents. The Draft Program EIR water and wastewater analysis were completed in coordination with Cucamonga Valley Water District staff and were based on information available at that time. These potential inconsistencies do not substantially alter the analysis or change the conclusions; therefore, these inconsistencies do not render the Program EIR inadequate or legally indefensible.

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Letter 10

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

SHEILA MAUTZ
JIM W. BOWMAN
DEBRA DORST-PORADA
COUNCIL MEMBERS

March 29, 2010

CHRIS HUGHES
CITY MANAGER

MARY E. WIRTES, MMC
CITY CLERK

JAMES R. MILHISER
TREASURER

City of Rancho Cucamonga
Planning Department
Mr. James Troyer, Planning Director
10500 Civic Center Drive
Rancho Cucamonga, California 91730

CITY OF RANCHO CUCAMONGA

APR 01 2010

RECEIVED - PLANNING

RE: Notice of Availability of Draft Environmental Impact Report for the City of Rancho Cucamonga General Plan Update Project

Mr. Troyer,

Thank you for allowing the City of Ontario the opportunity to review and comment on the above referenced project. After reviewing the information provided for the proposed general plan update, the City of Ontario has identified the following concerns which were not analyzed and included in the DEIR:

1. Address ways to redistribute the heavy truck volumes generated by the City of Rancho Cucamonga industrial developments away from Ontario's shared hospitality and retail corridors along Fourth Street between Milliken Avenue and the I-15 Freeway and on Milliken Avenue between Fourth Street and the I-10 Freeway via a new interchange on the I-15 Freeway within the City of Rancho Cucamonga. Provide timeline for the construction of the new interchange. Section 4.16 did not discuss the impact caused by the vehicular and truck traffic redistribution on the new I-15 interchanges. } 1
2. Analyze and estimate Rancho Cucamonga's fair share contribution for the modification of the I-10 Freeway at Vineyard Avenue Interchange due to trips generated in Rancho Cucamonga. The current SANBAG Measure I Nexus Study does not assign a fair share of the interchange costs to Rancho Cucamonga. This Interchange Improvement Project should be included in Section 4.16.1. } 2
3. Discuss and address the potential hydraulic and water quality impacts along the City of Ontario border that may be created by proposed changes in drainage patterns in the Rancho Cucamonga General Plan Update. } 3

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Mr. Troyer
March 29, 2010

4. Exhibit 4.16-2 (Bicycle Plan) should be corrected to reflect the City of Ontario's Figure M-3 Multipurpose Trails and Bikeway Corridor Plan south of Fourth Street. Figure M-3 is attached for your information. } 4
5. The City of Ontario currently owns a parcel (APN 0229-023-07) located on the eastside of Rochester Avenue just south of Foothill Boulevard in the City of Rancho Cucamonga for future construction of an 8 million gallon potable water reservoir for the 1212 Pressure Zone as identified in the City's Water and Recycled Water Master Plan. The DEIR should address any impacts to ensure that the proposed land use plan remains compatible with Ontario's future use of the site. } 5

We appreciate being involved in the environmental review of the project and look forward to continued communications regarding this project. If you have any questions regarding our comments, please contact me at (909) 395-2421.

Sincerely,



Richard C. Ayala
Senior Planner

Attachment:

The Ontario Plan - Figure M-3 (Multipurpose Trails and Bikeway Corridor Plan)

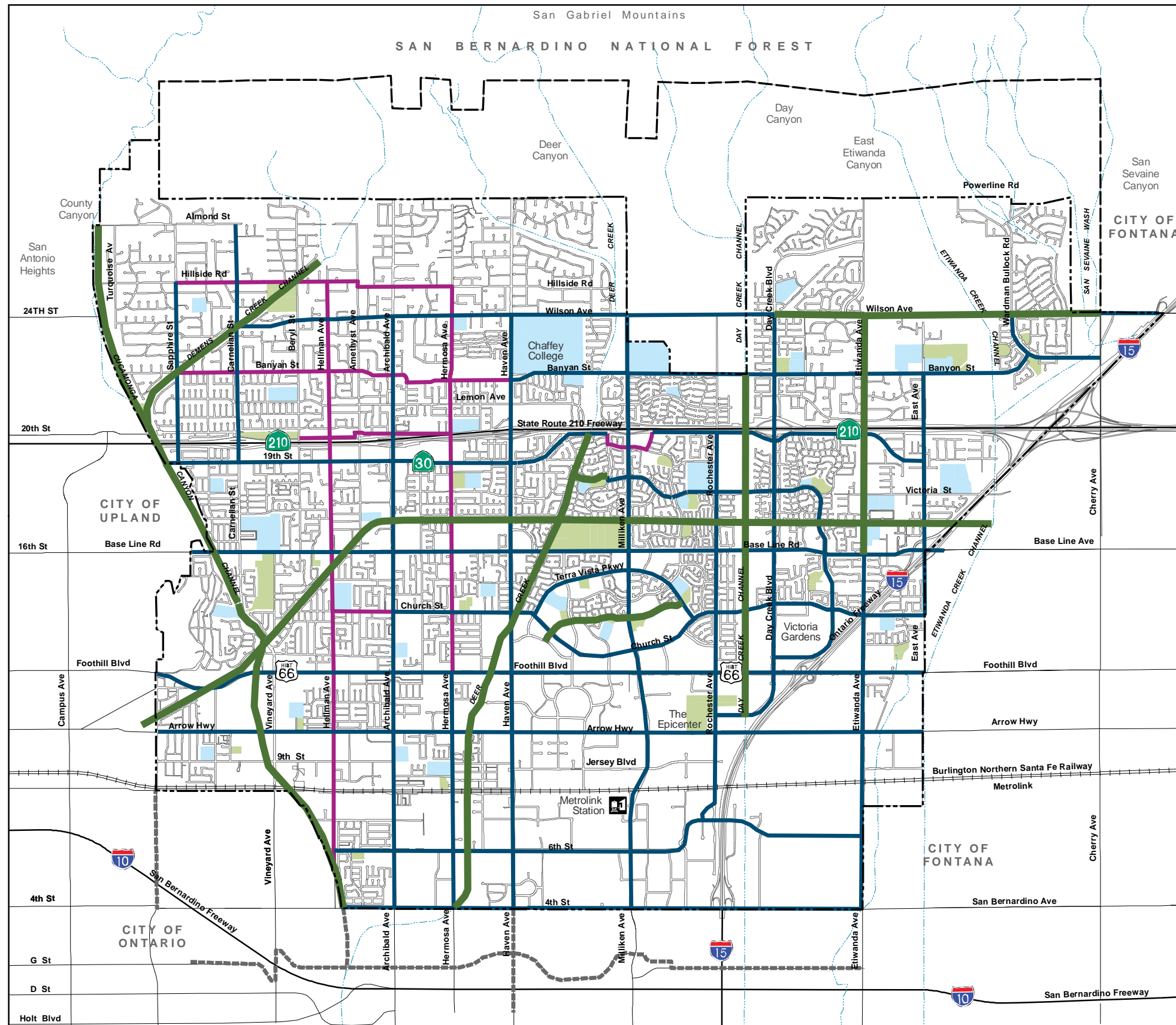
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Letter 10 City of Ontario
Richard C. Ayala
March 29, 2010

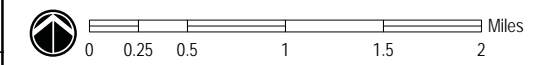
Response to Letter 10

1. A new Interstate (I) 15 interchange in the vicinity of Arrow Highway has been identified in previous General Plans as well as the current 2010 General Plan Update as a potential future project. However, this interchange is still in the preliminary planning stages and is not a foreseeable project in the future, nor is it defined enough to be specifically addressed in the Draft Program EIR. As stated in the Implementation Action for Policy CM-1.1 (p. 4.3-15 of the Draft Program EIR), the City has plans to review the feasibility of providing an interchange at Arrow Highway according to preliminary recommendations by the California Department of Transportation (Caltrans). A future project involving a new interchange would be subject to separate environmental review, including a traffic analysis to ensure any impacts are adequately mitigated.
2. The modification of the I-10 Freeway at Vineyard Avenue Interchange was submitted to, and reviewed by the San Bernardino Associated Governments (SANBAG), after the identified deadline to be considered for the current SANBAG Measure I Nexus Study; therefore, a fair share analysis was not done for the proposed interchange modification project. Preparation of such an analysis is beyond the scope of the 2010 General Plan Update Program EIR as this Program EIR addresses the impacts of the 2010 General Plan Update that is limited to the City limits and sphere of influence of the City of Rancho Cucamonga. A fair share analysis should be prepared by SANBAG pursuant to the San Bernardino Congestion Management Plan.
3. As discussed in Section 4.9, Hydrology and Water Quality, of the Draft Program EIR, future development and redevelopment projects associated with the 2010 General Plan Update will be subject to various standard conditions based on regulations of the quality and hydraulics of storm water flows. Specifically, all projects would be subject to the Santa Ana Regional Water Quality Control Board's (RWQCB's) Water Quality Control Plan for the Santa Ana River Basin, which requires individual developments (1) to obtain water quality certifications and/or waste discharge permits and (2) to comply with discharge prohibitions, Total Maximum Daily Loads, and other related programs of the RWQCB. Based on the Draft Program EIR's program-level analysis, required compliance with these standard conditions would ensure that impacts related to storm water flows leaving future project sites would comply with all regulatory standards and not significantly impact neighboring properties. As future development and redevelopment applications are considered, individual projects will be reviewed on a site-specific basis to ensure compliance with regulations; this would result in less than significant impacts related to hydrology and water quality impacts and drainage patterns along the City of Ontario border.
4. Exhibit 4.16-2, Bicycle Plan, has been revised to reflect the City of Ontario's Figure M-3 Multipurpose Trails and Bikeway Corridor Plan south of Fourth Street. The revised Exhibit follows this page.
5. The land use designation for this parcel, General Commercial, is unchanged from the 2001 General Plan. The Draft Program EIR considers land use compatibility based on allowable land uses within the General Commercial designation. However, the current and proposed land use designation (Community Commercial) does not allow for development of a potable water reservoir; therefore, any future development proposal

would be subject to City review for compliance with the California Environmental Quality Act (CEQA). The future development application and CEQA documentation would be required to consider land use compatibility impacts at the time of the proposal. The City of Rancho Cucamonga recommends that contact be made with the City's Planning Department for assistance when the City of Ontario is ready to move forward with this plan. No further response is required under CEQA as this comment does not raise any significant environmental issues.



- Bicycle Plan**
- Class I (Bike Path or Trail)
 - Class II (Bike Lane)
 - Class III (Bike Street)
 - Bike Routes Outside Rancho Cucamonga
- Parks and Schools**
- Schools
 - Parks
- Other Symbols**
- Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways



Bicycle Plan

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-2



D:/Projects/Hogle/J007/Graphics/ex_bikeplan.ai

Letter 11



South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

Emailed: April 1, 2010

April 1, 2010

Mr. James Troyer, Planning Director
Planning Department
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

**Review of the Draft Environmental Impact Report (Draft EIR) for the
City of Rancho Cucamonga 2010 General Plan Update Project**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comment is intended to provide guidance to the lead agency and should be incorporated into the revised Draft or Final Environmental Impact Report (Draft or Final EIR) as appropriate.

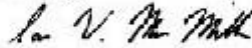
The SCAQMD staff recognizes the regional air quality benefits of the proposed project such as providing a new mixed land use designation that could potentially reduce overall vehicle miles traveled in the region. However, SCAQMD staff is concerned about the proposed placement of certain new mixed land uses in close proximity to industrial uses and adjacent to Interstate 15 (Please see the Draft General Plan Land Use Map in Exhibit A). According to page three in Appendix A of the Draft EIR the mixed land use designation allows for residential uses. Therefore, the placement of mixed land uses near industrial uses and a freeway could expose sensitive receptors to significant sources of air pollution resulting in potentially significant health risk impacts. As a result, SCAQMD staff requests that the lead agency reduce future potential project related health impacts by adhering to all applicable advisory recommendations for sensitive land uses provided in the CARB Air Quality and Land Use Handbook (available at: <http://www.arb.ca.gov/ch/landuse.htm>).

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Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the lead agency to address these issues and any

other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,



Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:DG

SBC100218-01
Control Number

Letter 11 South Coast Air Quality Management District
Ian MacMillan, Program Supervisor, CEQA Inter-Governmental Review Planning,
Rule Development & Area Sources
April 1, 2010

Response to Letter 11

1. As identified on page 4.3-32 of the Draft Program EIR, there are no railyards in the City of Rancho Cucamonga nor are there any residential land uses proposed next to freeways. Specifically, the Victoria Gardens Master Plan Supplemental EIR (refer to Figure 4.2.2, attached) has designated that all residential uses or other sensitive receptors be located over 500 feet from I-15. Therefore, the Victoria Gardens Master Plan would ensure that sensitive receptors would not be exposed to significant sources of air pollution from freeways.

According to the General Plan Land Use Plan (Draft Program EIR Exhibit 3-3), there are several areas designated for mixed-use development that are proximate to industrial land use designations (Mixed Use Areas 2, 3, 4, 7, and 10). Several of these areas are already fully built out with mixed-use land uses, including residential uses. Future development and redevelopment within the remaining mixed-use areas would be required to comply with recommendations set forth in the California Environmental Protection Agency and California Air Resources Board Air Quality and Land Use Handbook: A Community Health Perspective (SC 4.3-2). Further, future development and redevelopment within areas designated for industrial land uses would be subject to compliance with South Coast Air Quality Management District Rule 202, Standards for Approving Permits (SC 4.3-3), and Rule 1402, Control of Toxic Air Contaminants from Existing Sources. Compliance with these standard conditions would ensure that a significant impact related to proximity of sensitive receptors to industrial uses would not occur.

The following revisions to the text have been made to the Draft Program EIR. **Bold, strikeout text** is used to show deleted wording and **bold, italic text** is used to show wording that has been added.

Page 4.3-28, first paragraph

Standard Conditions

SC 4.3-1 All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM2.5 and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.

SC 4.3-2 *All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with the recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective, prepared by California Environmental Protection Agency and California Air Resources Board (April 2005), for siting new sensitive land uses.*

SC 4.3-3 All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 212, Standards for Approving Permits, related to permitting projects based on the anticipated output of air contaminants and proximity to sensitive receptors.

SC 4.3-4 All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 1402, Control of Toxic Air Contaminants from Existing Sources, related to reducing the health risk associated with toxic air contaminants from existing sources.

Page 4.3-32, first paragraph

Diesel Particulate Matter Emissions

In 1998, the CARB identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). The CARB Air Quality and Land Use Handbook describes that diesel fueled vehicles that emit DPM from nearby freeways or rail yards could be a problem for any residential areas within 500 feet of freeways and 1,000 feet of rail yards or related distribution centers. TAC impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime. There are no rail yards in the City of Rancho Cucamonga. Additionally, ~~there are no new residential land uses proposed~~ **land use policy does not establish plans for additional residential use** next to freeways.

According to the General Plan Land Use Plan (refer to Exhibit 3-3), there are several areas designated for mixed-use development that are proximate to industrial land use designations (Mixed Use Areas 2, 3, 4, 7, and 10). Several of these areas are already fully built out with mixed-use land uses, including residential uses. Future development and redevelopment within the remaining mixed-use areas would be required to comply with recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective prepared by the California Environmental Protection Agency and California Air Resources Board in April 2005 (SC 4.3-2). Further, future development and redevelopment within areas designated for industrial land uses would be subject to compliance with South Coast Air Quality Management District Rule 202, Standards for Approving Permits (SC 4.3-3), and Rule 1402, Control of Toxic Air Contaminants from Existing Sources. Compliance with these standard conditions would ensure that a significant impact related to proximity of sensitive receptors to industrial uses would not occur.

As a result, there would be less than significant impacts related to TAC emissions from the proposed 2010 General Plan Update.

*Impacts 4.3b and 4.3 d: The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NO_x, and increase for PM_{2.5}, PM₁₀ and SO_x. The net increase in SO_x emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and ~~there are no new residential land uses proposed~~ land use policy does not establish plans for additional residential use next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. **Additionally, compliance with SCs 4.3-2 through 4.3-4 would ensure no significant impacts related to proximity of sensitive receptors to TAC-emitting industrial uses would occur.** Implementation of identified 2010 General Plan Update goals and policies and SC 4.3-1 as well as MMs 4.3-1 through 4.3-3, as feasible, would reduce long-term criteria air pollutant emissions; however, these reductions are not quantifiable at the time. Therefore, the anticipated net increase in PM₁₀ and PM_{2.5} emissions would be considered a significant and unavoidable direct impact.*

Pages 1-11 through 1-13, Table ES-1

<p>Air Quality Standards Violation and Exposure of Sensitive Receptors The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NO_x, and increase for PM_{2.5}, PM₁₀ and SO_x. The net increase in SO_x emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. Additionally, compliance with standard conditions would ensure no significant impacts related to proximity of sensitive receptors to TAC-emitting industrial uses would occur. Implementation of applicable goals and policies, standard condition, and mitigation measures would reduce long-term</p>	<p>SC 4.3-1 All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM_{2.5} and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.</p> <p>SC 4.3-2 All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with the recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective, prepared by California Environmental Protection Agency and California Air Resources Board (April 2005), for siting new sensitive land uses.</p> <p>SC 4.3-3 All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 212, Standards for Approving Permits, related to permitting projects based on the anticipated output of air contaminants and proximity to sensitive receptors.</p>	<p>Significant and Unavoidable.</p>
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<p>criteria air pollutant emissions; however, these reductions are not quantifiable at this time. Therefore, the anticipated net increase in PM₁₀ and PM_{2.5} emissions would be considered significant and unavoidable.</p>	<p>SC 4.3-4</p> <p><i>All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 1402, Control of Toxic Air Contaminants from Existing Sources, related to reducing the health risk associated with toxic air contaminants from existing sources.</i></p> <p>MM 4.3-1</p> <p>Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-2</p> <p>Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-3</p> <p>The City of Rancho Cucamonga shall ensure that future projects to be developed under the proposed 2010 General Plan Update implement the following construction-period measures to reduce criteria pollutant emissions, including, but not limited to, compliance with SCAQMD Rules as described below. These measures shall be verified either during review of project plans and specifications and/or during construction. Construction-period measures to be enforced include:</p> <ul style="list-style-type: none"> • All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per manufacturers' specifications. Maintenance records shall be available at the construction site for City verification. • Prior to the issuance of any grading permits, the developer shall submit Construction Plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District (SCAQMD) as well as City Planning staff. • The construction contractor shall utilize electric or clean alternative fuel-powered equipment where feasible. • The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use. 	
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	<ul style="list-style-type: none">• All construction equipment shall comply with SCAQMD Rules 402(Nuisance) and Rule 403 (Fugitive Dust Control).• All asphalt shall meet or exceed performance standards noted in SCAQMD Rule 1108 (Cutback Asphalt).• All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113 (Architectural Coatings). Paints and coatings shall be applied either by hand or high-volume, low-pressure spray.	
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INDIVIDUALS

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Letter 12

March 3, 2010

James Troyer, Planning Director
City of Rancho Cucamonga
Planning Department
10500 Civic Center Drive
Rancho Cucamonga, CA 91730

RE: GENERAL PLAN UPDATE (LAND USE DESIGNATION FOR APN:1100-201-05)

Dear Mr. Troyer:

Pacific Communities Builder Inc. (PCB) owns the aforementioned parcel consisting of approximately 13 acres, located on the north side of Foothill Blvd. west of East Ave and east of Etiwanda Ave. This letter expresses PCB's intent on proposing a medium high residential density designation and in opposition to the "office" land use designation for this parcel as shown on the proposed land use plan of the draft General Plan update. Existing neighboring properties to the west and south east across the street are designated medium residential with a neighborhood park to the north and a utility corridor to the east. PCB would like to be consistent with neighboring medium residential land use designations for this parcel by being assigned the same designation. PCB has intended to develop this parcel with multi-family residential housing for several years and will share common use of the primary access road off Foothill Boulevard with the William Lyons Home residential development to the west to provide shared access for this site. PCB has had to delay processing a development application for this parcel due to the construction and use of an interim detention basin facility on-site to serve all developments in the watershed until completion of the master storm drain system to service this area. It is our understanding from our conversations with engineering staff at the City that this has now been completed and as such PCB can now proceed with the application process for development of this site. PCB believes that that a medium residential designation is optimal at this location for the reasons outlined below.

The aforementioned utility corridor/easement bisects a portion of this parcel and as such this easement area must be maintained as open space. The open space separation between this parcel and commercial areas to the east will provide the appropriate transition and buffer between residential and commercial uses. Whereas an "office" center at this location will likely result in more traffic and offer no buffer between the neighboring William Lyons residential development on the west boundary

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1000 Dove Street • Suite 100 • Newport Beach • CA 92660 • Tel 949-660-8988 • Fax 949-660-8866

and other adjacent residential uses. Given this parcel's limited frontage on Foothill Boulevard and close proximity to the shared primary access street with the William Lyons residential development it is unlikely that another main access road/driveway can be accommodated and as such the shared access road on the west will be burdened by a bigger influx of traffic. Furthermore, a commercial office center at this location will detract from and minimize enjoyment of the neighborhood park to the north.

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cont.

Please include these comments in the administrative record for this matter. Should you have any questions, you may contact me at (949) 660-8988 ext. 123.

Sincerely,



Elsa Trujillo, Project Manager
PACIFIC COMMUNITIES BUILDER INC.

cc: Corkran Nicholson, Assistant Planning Director
Allan Warren,

Letter 12 Pacific Communities Builder, Inc.
Elsa Trujillo, Project Manager
March 3, 2010

Response to Letter 12

1. No response is required under CEQA.

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SECTION 4.0 ERRATA

Revisions and clarifications have been made to the Rancho Cucamonga 2010 General Plan Update PEIR based on input received during the public review period and the preparation of responses to comments on the Draft PEIR. This Errata section of the Responses to Comments document follows the organization of the Draft PEIR. Only those sections of the PEIR which have revisions and/or clarifications are noted. ~~**Bold, strikeout text**~~ is used to show deleted wording and ***bold, italic text*** is used to show wording that has been added.

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Section 1.0 Executive Summary

Page 1-9, Table ES-1

SECTION 4.2 – AGRICULTURAL RESOURCES		
<p>Farmland Resources Future Development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses.</p>	<p>No measures are identified. MM 4.2-1 <i>Should a future project propose to develop designated Important Farmlands (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and/or Farmland of Local Importance) pursuant to the current Farmland Mapping and Monitoring Program map, the Project Applicant shall implement measure(s) to reduce impacts related to the loss of farmland to the satisfaction of the Planning Director. Feasible mitigation measures may include, but not be limited to, the 1) purchase of land within a permanent agricultural conservation easement, as approved by the Planning Director, of at least equal quality and size as partial compensation for the direct loss of agricultural land; 2) donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose include the acquisition and stewardship of agricultural conservation easements; or 3) direct conservation of a portion of designated Important Farmlands on the future project site. Should a project contribute to growth-inducing or cumulative impacts related to the loss of agricultural land, adequate compensation values in the form of permanent agricultural conservation easements shall be evaluated on a project-specific basis.</i></p>	<p>Significant and Unavoidable.</p>

Pages 1-10 through 1-13, Table ES-1

<p>Air Quality Standards Violation and Exposure of Sensitive Receptors The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NO_x, and increase for PM_{2.5}, PM₁₀ and SO_x. The net increase in SO_x emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there</p>	<p>MM 4.3-1 The City of Rancho Cucamonga shall work with the ensure that applicants of future projects to be developed under the proposed 2010 General Plan Update to implement the following measures, derived from the SCAQMD's AQMP, where feasible, in order to reduce criteria air pollutant emissions, primarily related to vehicular travel and energy. Potential measures for consideration in future projects include:</p> <ul style="list-style-type: none"> • Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides. • Provide preferential parking to high occupancy vehicles and shuttle services. • Schedule truck deliveries and pickups during off-peak hour. 	<p>Significant and Unavoidable.</p>
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<p>would be a less than significant TAC impact from emissions of Diesel Particulate Matter.</p>	<ul style="list-style-type: none"> • Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors. • Landscape with native and/or drought-resistant species to reduce water consumption and to provide passive solar benefits. • Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure. • Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations. <p>MM 4.3-2</p> <p>The City of Rancho Cucamonga has developed the following requirements for specified land uses shall ensure that applicants of future projects to be developed under the proposed 2010 General Plan Update implement the following measures to reduce criteria pollutant emissions. These measures shall be verified either during review of project plans and specifications. Measures to be enforced include:</p> <ul style="list-style-type: none"> • All industrial and commercial facilities shall post signs requiring that trucks shall not be left idling for prolonged periods (i.e., in excess of 10 minutes). • All industrial and commercial facilities shall designate preferential parking for vanpools. • All industrial and commercial site tenants with 50 or more employees shall be required to post both bus and Metrolink schedules in conspicuous areas. • All industrial and commercial site tenants with 50 or more employees shall be required to configure their operating schedules around the Metrolink schedule to the extent reasonably feasible. • All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters. • All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping. 	
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<p>Air Quality Standards Violation and Exposure of Sensitive Receptors</p> <p>The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NO_x, and increase for PM_{2.5}, PM₁₀ and SO_x. The net increase in SO_x emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. Additionally, compliance with standard conditions would ensure no significant impacts related to proximity of sensitive receptors to TAC-emitting industrial uses would occur. Implementation of applicable goals and policies, standard condition, and mitigation measures would reduce long-term criteria air pollutant emissions; however, these reductions are not quantifiable at this time. Therefore, the anticipated net increase in PM₁₀ and PM_{2.5} emissions would be considered significant and unavoidable.</p>	<p>SC 4.3-1</p> <p>All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM_{2.5} and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.</p> <p>SC 4.3-2</p> <p><i>All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with the recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective, prepared by California Environmental Protection Agency and California Air Resources Board (April 2005), for siting new sensitive land uses.</i></p> <p>SC 4.3-3</p> <p><i>All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 212, Standards for Approving Permits, related to permitting projects based on the anticipated output of air contaminants and proximity to sensitive receptors.</i></p> <p>SC 4.3-4</p> <p><i>All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 1402, Control of Toxic Air Contaminants from Existing Sources, related to reducing the health risk associated with toxic air contaminants from existing sources.</i></p> <p>MM 4.3-1</p> <p>Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-2</p> <p>Refer to Air Quality Management Plan Consistency, above.</p> <p>MM 4.3-3</p> <p>The City of Rancho Cucamonga shall ensure that future projects to be developed under the proposed 2010 General Plan Update implement the following construction-period measures to reduce criteria pollutant emissions, including, but not limited to, compliance with SCAQMD Rules as described below. These measures shall be verified either during review of project plans and specifications and/or during construction. Construction-period measures to be enforced include:</p> <ul style="list-style-type: none"> • All construction equipment shall be 	<p>Significant and Unavoidable.</p>
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	<p>maintained in good operating condition so as to reduce operational emissions. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per manufacturers' specifications. Maintenance records shall be available at the construction site for City verification.</p> <ul style="list-style-type: none"> • Prior to the issuance of any grading permits, the developer shall submit Construction Plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District (SCAQMD) as well as City Planning staff. • The construction contractor shall utilize electric or clean alternative fuel-powered equipment where feasible. • The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use. • All construction equipment shall comply with SCAQMD Rules 402(Nuisance) and Rule 403 (Fugitive Dust Control). • All asphalt shall meet or exceed performance standards noted in SCAQMD Rule 1108 (Cutback Asphalt). • All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113 (Architectural Coatings). Paints and coatings shall be applied either by hand or high-volume, low-pressure spray. 	
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Section 4.2 Agriculture and Forest Resources

Page 4.2-6, Fifth Paragraph

Since the existing vineyards are small, scattered operations that do not support any larger-scale agricultural uses and since they represent less than one percent of the total Important Farmland in the County, their conversion to urban land uses is not expected to have a major impact on the County's crop value. However, future development associated with buildout of the proposed 2010 General Plan Update pursuant to the proposed Land Use Plan (refer to Exhibit 3-3 in Section 3.0, Project Description) would result in the conversion of these farmland areas to non-agricultural uses, thus creating a significant impact. **Implementation of MM 4.2-1 would reduce impacts related to conversion of farmlands; however, the impact would remain significant and unavoidable.** ~~There are no feasible mitigation measures to address this impact under the proposed land~~

~~use plan; therefore, buildout of the proposed 2010 General Plan Update would result in a significant and unavoidable impact related to the conversion of farmland.~~

Page 4.2-7, Second Paragraph

Impact 4.2a Future development under the proposed Land Use Plan would lead to the conversion of 196.26 acres of Important Farmland into non-agricultural uses. **Implementation of MM 4.2-1 would reduce impacts related to conversion of farmlands; however, the impact would remain significant and unavoidable.** ~~No mitigation is available under the proposed land use plan; therefore, this loss of farmland would result in a significant and unavoidable impact.~~

Page 4.2-8, Subsection 4.2.8

4.2.8 MITIGATION MEASURES

~~No mitigation measures are available to reduce the identified impacts to agricultural resources.~~

MM 4.2-1 *Should a future project propose to develop designated Important Farmlands (Prime Farmland, Farmland of Statewide Importance, Unique Farmland and/or Farmland of Local Importance) pursuant to the current Farmland Mapping and Monitoring Program map, the project applicant shall implement measure(s) to reduce impacts related to the loss of farmland to the satisfaction of the Planning Director. Feasible mitigation measures may include, but not be limited to, the 1) purchase of land within a permanent agricultural conservation easement, as approved by the Planning Director, of at least equal quality and size as partial compensation for the direct loss of agricultural land; 2) donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements; or 3) direct conservation of a portion of designated Important Farmlands on the future project site. Should a project contribute to growth inducing or cumulative impacts related to the loss of agricultural land, adequate compensation values in the form of permanent agricultural conservation easements shall be evaluated on a project-specific basis.*

Section 4.3 Air Quality

Page 4.3-28, first paragraph

Standard Conditions

- SC 4.3-1** All new development in the City of Rancho Cucamonga would be required to comply with South Coast Air Quality Management District's Rule 445, Wood Burning Devices. Rule 445 was adopted in March 2008 to reduce emissions of PM2.5 and precludes the installation of indoor or outdoor wood burning devices (i.e. fireplaces/hearths) in new development on or after March 9, 2009.
- SC 4.3-2** *All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with the recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective, prepared by California Environmental Protection Agency and California Air Resources Board (April 2005), for siting new sensitive land uses.*
- SC 4.3-3** *All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 212, Standards for Approving Permits, related to permitting projects based on the anticipated output of air contaminants and proximity to sensitive receptors.*
- SC 4.3-4** *All future development and redevelopment in the City of Rancho Cucamonga shall be required to comply with South Coast Air Quality Management District's Rule 1402, Control of Toxic Air Contaminants from Existing Sources, related to reducing the health risk associated with toxic air contaminants from existing sources.*

Page 4.3-32, first paragraph

Diesel Particulate Matter Emissions

In 1998, the CARB identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). The CARB Air Quality and Land Use Handbook describes that diesel fueled vehicles that emit DPM from nearby freeways or rail yards could be a problem for any residential areas within 500 feet of freeways and 1,000 feet of rail yards or related distribution centers. TAC impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime. There are no rail yards in the City of Rancho Cucamonga. Additionally, there are no new residential land uses proposed next to freeways.

According to the General Plan Land Use Plan (refer to Exhibit 3-3), there are several areas designated for mixed-use development that are proximate to industrial land use designations (Mixed Use Areas 2, 3, 4, 7, and 10). Several of these areas are already fully built out with mixed-use land uses, including residential uses. Future development and redevelopment within the remaining mixed-use areas would be required to comply with recommendations set forth in the Air Quality and Land Use Handbook: A Community Health Perspective prepared by the California Environmental Protection Agency and California Air Resources Board in April 2005 (SC 4.3-2). Further, future development and redevelopment within areas designated for industrial land uses would be subject to compliance with South Coast Air Quality Management District Rule 202, Standards for Approving Permits (SC 4.3-3), and Rule 1402, Control of Toxic Air Contaminants from Existing Sources. Compliance with these standard conditions would ensure that a significant impact related to proximity of sensitive receptors to industrial uses would not occur.

As a result, there would be less than significant impacts related to TAC emissions from the proposed 2010 General Plan Update.

*Impacts 4.3b and 4.3 d: The net change in emissions with implementation of the proposed 2010 General Plan Update when compared to the Existing Conditions (2009) would decrease significantly for CO, VOC and NO_x, and increase for PM_{2.5}, PM₁₀ and SO_x. The net increase in SO_x emissions would not exceed the SCAQMD threshold and would be considered a less than significant impact. Estimated net emissions of PM_{2.5} and PM₁₀ would exceed SCAQMD thresholds and would be a significant impact. Regarding TACs, there are no rail yards in the City, and there are no new residential land uses proposed next to freeways. Therefore, there would be a less than significant TAC impact from emissions of Diesel Particulate Matter. **Additionally, compliance with SCs 4.3-2 through 4.3-4 would ensure no significant impacts related to proximity of sensitive receptors to TAC-emitting industrial uses would occur.** Implementation of identified 2010 General Plan Update goals and policies and SC 4.3-1 as well as MMs 4.3-1 through 4.3-3, as feasible, would reduce long-term criteria air pollutant emissions; however, these reductions are not quantifiable at the time. Therefore, the anticipated net increase in PM₁₀ and PM_{2.5} emissions would be considered a significant and unavoidable direct impact.*

Page 4.3-34 and 4.3-35, MM 4.3-1 and MM 4.3-2

MM 4.3-1 The City of Rancho Cucamonga shall ~~work with the~~ **ensure that** applicants of future projects to be developed under the proposed 2010 General Plan Update ~~to~~ implement the following measures, derived from the SCAQMD's AQMP, where feasible, in order to reduce criteria air pollutant emissions, primarily related to

vehicular travel and energy. Potential measures for consideration in future projects include:

- Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides.
- Provide preferential parking to high occupancy vehicles and shuttle services.
- Schedule truck deliveries and pickups during off-peak hour.
- Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors.
- Landscape with native and/or drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure.
- Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations.

MM 4.3-2

The City of Rancho Cucamonga ~~has developed the following requirements for specified land uses~~ **shall ensure that applicants of future projects to be developed under the proposed 2010 General Plan Update implement the following measures** to reduce criteria pollutant emissions. These measures shall be verified either during review of project plans and specifications. Measures to be enforced include:

- All industrial and commercial facilities shall post signs requiring that trucks shall not be left idling for prolonged periods (i.e., in excess of 10 minutes).
- All industrial and commercial facilities shall designate preferential parking for vanpools.
- All industrial and commercial site tenants with 50 or more employees shall be required to post both bus and Metrolink schedules in conspicuous areas.
- All industrial and commercial site tenants with 50 or more employees shall be required to configure their operating schedules around the Metrolink schedule to the extent reasonably feasible.

- All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters.
- All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping.

Page 4.3-36, Subsection 4.3.9

4.3.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Air Quality Management Plan Consistency

No Impact.

Air Quality Standards Violation and Exposure of Sensitive Receptors

Significant and Unavoidable for Long-term Regional Emissions.

~~Less Than Significant~~ **and Unavoidable** for PM₁₀ and PM_{2.5}.

Less than Significant for VOC, NO_x, CO, SO_x and TACs.

Cumulative

Significant and Unavoidable for PM₁₀ and PM_{2.5}.

Less than Significant for VOC and NO_x.

Odors

Less Than Significant.

Section 4.4 Biological Resources

Page 4.4-28, first paragraph

Additionally, Policy RC-8.3 requires the City to utilize innovative measures that will allow the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas. The City shall continue to work with the County of San Bernardino, the CDFG, and the USFWS to protect sensitive biological resources within the City's Planning Area through the creation of a system of preserves and open space along the foothills of the San Gabriel Mountains ~~that will become part of a larger Multiple Species Habitat Conservation Plan (MSHCP) for the County of San Bernardino.~~

Section 4.9 Hydrology and Water Quality

Page 4.9-20, first paragraph

The Chino Basin Watermaster **Master Plan** regulates groundwater pumping for the Chino Groundwater Basin and the Cucamonga Groundwater Basin.

Section 4.10 Utilities and Service Systems

Page 4.10-36, Subsection 4.10.8.

4.10.8 MITIGATION MEASURES

MM 54.10-1 The City of Rancho Cucamonga Planning Department shall monitor all development that takes place within the Study Area against the projected target densities detailed in Tables LU-16, LU-17, and LU-18 of the proposed 2010 General Plan Update. As buildout of the proposed 2010 General Plan Update Study Area approaches 80 percent of the total additional development allowed, the City of Rancho Cucamonga shall initiate environmental analysis to address full buildout of the proposed 2010 General Plan Update or prepare an update to the General Plan to be completed prior to reaching the established target densities herein.

Section 4.14 Public Services

Page 4.14-10, last two sentences of the second paragraph

This increase in demand for police services would be met through the hiring of additional staff **as well as construction of additional facilities**, as needed, which would be funded through existing funding mechanisms such as the general fund revenue and grant funding. Therefore, impacts related to police services would be less than significant; no mitigation is required.

Section 4.16 Transportation/Traffic

Exhibit 4.16-2, following Page 4.16-12, is replaced with the revised Exhibit 4.16-2 (refer to following page).

Section 4.17 Utilities and Service Systems

Page 4.17-24, Subsection 4.17.9.

4.17.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Water Supply and Infrastructure

Less Than Significant.

Wastewater Infrastructure and Treatment

Less Than Significant.

Electricity, Natural Gas and Communication Infrastructure

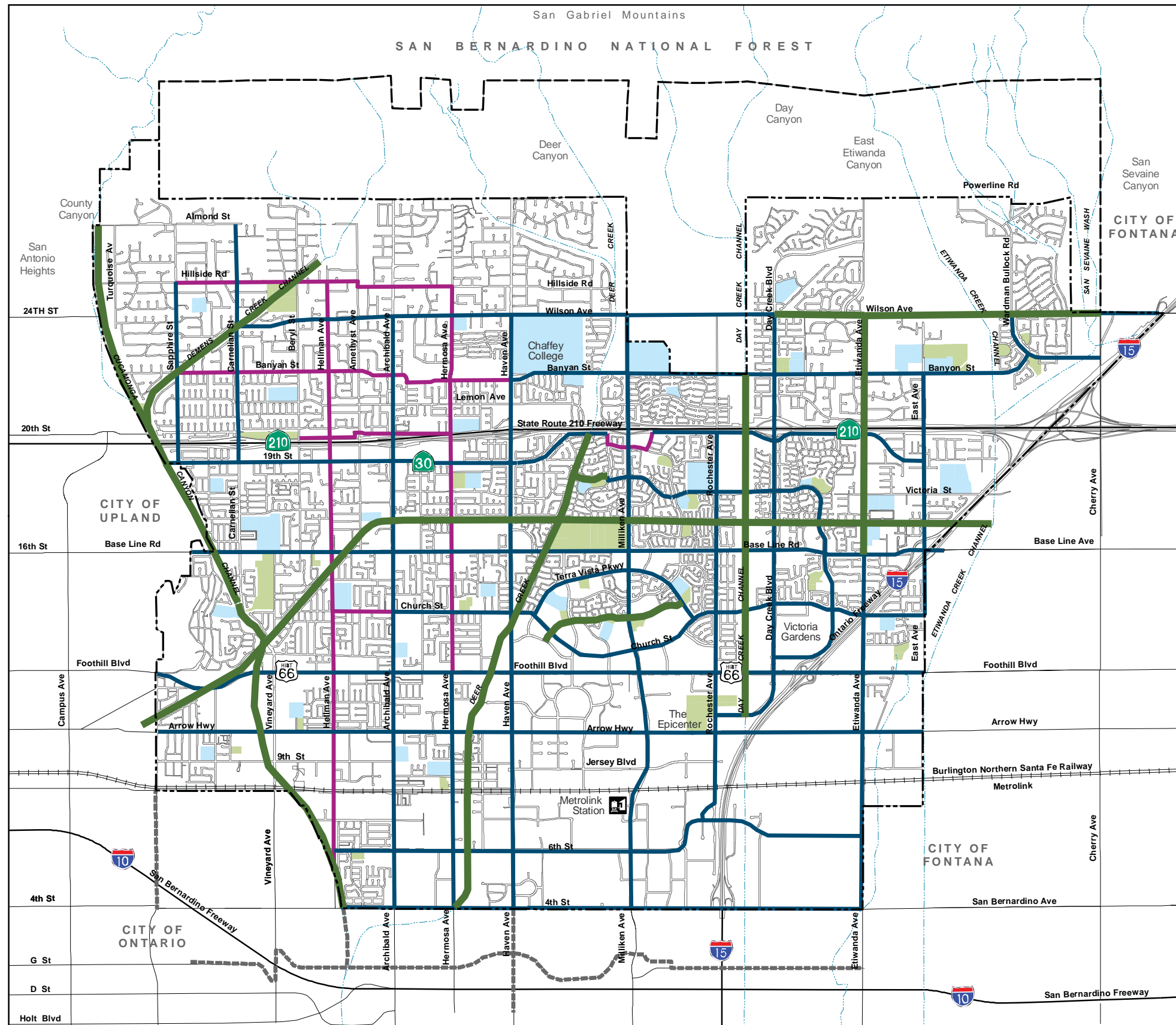
Less Than Significant.

Solid Waste

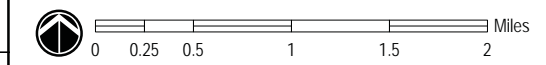
Less Than Significant.

Cumulative Impacts

Less Than Significant.



- Bicycle Plan**
- Class I (Bike Path or Trail)
 - Class II (Bike Lane)
 - Class III (Bike Street)
 - Bike Routes Outside Rancho Cucamonga
- Parks and Schools**
- Schools
 - Parks
- Other Symbols**
- Rancho Cucamonga City Boundary
 - Sphere of Influence
 - Waterways



Bicycle Plan

Rancho Cucamonga General Plan Update

Source: Rancho Cucamonga, 2009 and The Mobility Group, 2009

Exhibit 4.16-2

