CITY OF EASTVALE

EASTVALE GENERAL PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH No. 2011111061

Prepared for:

CITY OF EASTVALE
12363 LIMONITE AVENUE, SUITE 910
EASTVALE, CA 91752

Prepared by:

PMC®

SAN DIEGO, CA 92128
6020 CORNERSTONE COURT WEST

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ES Executive Summary

This section provides an overview of the proposed City of Eastvale General Plan Update and its environmental analysis. For additional detail regarding specific issues, please consult the appropriate chapter of Sections 3.1 through 3.6 (Environmental Setting, Impacts, and Mitigation Measures) of this Draft Environmental Impact Report (Draft EIR).

ES.1 PURPOSE AND SCOPE OF THE ENVIRONMENTAL IMPACT REPORT

This Environmental Impact Report (EIR) will provide, to the greatest extent possible, an analysis of any significant environmental effects associated with the implementation of the proposed General Plan Update, pursuant to the California Environmental Quality Act (CEQA).

This EIR analysis focuses on significant environmental impacts that could arise from implementation of the proposed General Plan through development of the land uses within the Planning Area, as regulated and guided by General Plan goals and policies. The EIR adopts this approach in order to provide record that the implementation of the proposed General Plan may produce significant environmental impacts. This EIR contains an existing plus project analysis.

ES.2 PROJECT DESCRIPTION

The proposed project is the adoption and implementation of a General Plan for the City of Eastvale. On October 1, 2010, the City of Eastvale was incorporated and the newly formed City Council adopted the Riverside County General Plan (2003) and municipal code to function as the City of Eastvale General Plan and municipal code (2010). The Riverside County General Plan contains supporting environmental studies, namely the Eastvale Area Plan, as well as extensive objectives, policies, and programs designed to identify and address any significant environmental impacts of development within Eastvale over the long term. Pursuant to state law, the City is required to adopt its own General Plan within 30 months of incorporation (April 2013). As directed by the City Council, the development of a new City of Eastvale General Plan was initiated by City staff.

The proposed General Plan is based on the City's interim General Plan (the Riverside County General Plan), yet is tailored to reflect the current conditions of the City and to better address issues that affect the City. The new City of Eastvale General Plan would replace the existing Riverside County General Plan as the "constitution" for land use planning in order to provide a basis for sound decisions regarding long-term physical development. The General Plan expresses the City's development goals and establishes public policy relative to the distribution of future land uses, both public and private.

State law requires that general plans address seven topics: land use, circulation, housing, conservation, open space, noise, and safety. The proposed General Plan consists of the seven required chapters (elements) as well as four optional elements. (For a brief description of each element please refer to Section 2.0, Project Description.) The proposed project will result in a new General Plan that includes existing (County of Riverside) goals and policies and new, Eastvale-specific goals and policies. A list of the specific issues that the new General Plan intends to address is shown below:

- Transitioning the City from a "building" mode to a "maintain and sustain" mode
- Maintaining the City's viability and desirability over time
- Addressing issues of health and wellness
- Maintaining the City's physical and economic systems over time

The City has decided to retain the existing land use designations in the current Riverside County General Plan. Roadway classifications and other physical planning in the Riverside County General Plan will remain unchanged. The analysis of this DEIR focuses only on the *changes* between the currently adopted Riverside County General Plan and the proposed new General Plan. (Note that many of these changes are advisory or procedural and not likely to cause any environmental impact.)

ZONING CODE AMENDMENTS

The proposed project also includes revisions to the City's Zoning Code. The current code is the Riverside County Zoning Ordinance which was adopted upon Eastvale's incorporation. The proposed changes to the Code are reflected in **Appendix 2.0-1**, and follow a similar approach to that of the General Plan Update. The proposed Zoning Code update does not make significant changes to the Riverside County Zoning Ordinance, but does clarify the development review process. A summary of the changes to the Zoning Code include:

- The reorganization of the Zoning Code into six chapters compared to the 23 "Articles" in the Riverside County Zoning Ordinance. These six chapters are organized as follows:
  - Chapter 1: Administration and Procedures
  - Chapter 2: Land Use Permits and Entitlements
  - Chapter 3: Zoning Districts
  - Chapter 4: Standards Related to Specific Uses
  - Chapter 5: Development Standards
  - Chapter 6: Glossary
- The reorganization of the Zoning Code into these six chapters focused on four basic topics:
  - Formatting and Structural Changes – Reorganizing the existing Zoning Code to assemble similar topics into one location.
  - Streamlining – Removing unnecessary and redundant information to make the Zoning Code shorter and more focused on important topics.
  - Entitlements – Updating the way projects are reviewed and approved to better reflect Eastvale issues and concerns.
  - Development Standards – Making limited changes to development standards to help the Zoning Code function better at a city level of detail (as opposed to a county level).
- The reorganization of the Zoning Code will allow for Development Agreements to be entered into between the City and project developers, which is currently not enabled under the Riverside County Zoning Ordinance as inherited by the City. Through a Development Agreement, a developer typically agrees to provide concessions to the local agency (for instance, funding for City projects above and beyond his/her typical

requirements) in return for a guarantee that the approval granted by the City will remain in place and unchanged for a defined period of time. This provides the City with concessions it would not otherwise be able to receive, and gives the developer the certainty of knowing that the project approval will not change. Development Agreement protocol is addressed in Chapter 1 of the draft Updated Zoning Code.

ES.3 PROJECT ALTERNATIVES SUMMARY

CEQA Guidelines Section 15126.6 requires that an EIR must describe a reasonable range of alternatives to the project which could feasibly attain most of the basic objectives of the project and that would avoid or substantially lessen the environmental effects of the project. Further, CEQA Guidelines Section 15126.6(e) requires that a "no project" alternative be evaluated in an EIR. The Draft EIR evaluates the following alternatives:

- **Alternative 1 – Existing General Plan Alternative (No Project Alternative)**. Alternative 1 represents a continuation of the existing 2003 Riverside County General Plan and zoning ordinance. As the General Plan would remain unchanged, this alternative does not update the Housing Element.

- **Alternative 2 – Eliminate Agricultural Land Conversion.** While the City has limited agricultural uses within its boundaries, the proposed project will eventually allow the conversion of all agricultural lands to urban uses. The EIR concludes that the conversion of agricultural land is a significant and unavoidable impact. To address the significant and unavoidable impact, this alternative would not provide or allow for the conversion of agricultural land to urban uses. As a result, development would occur on non-agricultural lands exclusively, and by increasing the density and intensity of development.

ES.4 AREAS OF ENVIRONMENTAL ISSUES

The City of Eastvale was identified as the lead agency for the proposed project. In accordance with Section 15082 of the CEQA Guidelines, the City of Eastvale prepared and distributed a Notice of Preparation (NOP) and Initial Study (IS) for the City of Eastvale General Plan project that was circulated for public review on November 21, 2011 (SCH2011111061). The NOP and IS included a summary of probable effects on the environment from the implementation of the project.

Written comments received in response to the NOP were considered in the preparation of the Draft EIR. The environmental issues raised in the NOP response letters included transportation and traffic, scenic resources, planning and land use, public services, climate change, hazards, air quality, cultural resources, and noise.

Section 1.0, Introduction, provides a summary of environmental issues related to the proposed General Plan and the Draft EIR, as presented to the City by agencies and the public during the NOP review period. The complete text of the NOP and NOP comments are included as **Appendix 1.0-1** to this Draft EIR.

ES.5 SUMMARY OF ENVIRONMENTAL IMPACTS

Table ES-1 displays a summary of impacts for the proposed General Plan and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance is indicated both before and after the implementation of each mitigation measure.

For the purposes of this EIR, the City has followed the Riverside County General Plan and EIR closely. Impacts that were considered by the County to be significant and unavoidable (agricultural land conversion, air quality, greenhouse gases and traffic), are also considered significant and unavoidable by the City.

Implementation of the proposed General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development; however, not to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR. The proposed City of Eastvale General Plan does not include changes to the existing land use map or circulation system.

Furthermore, by incorporating policies intended to avoid environmental impacts and seeking to create a mix of land uses, "connectivity" to better link the City's neighborhoods, a conceptual plan of on- and off-street bicycle lanes/routes and multiuse trails, and opportunities for "low-impact" or "green" development, the General Plan is largely self-mitigating. Rather than mitigating impacts from implementation of General Plan through mitigation measures in this EIR, the policies in General Plan are, to the extent feasible, intended to prevent the majority of environmental impacts altogether.

The implementation of the proposed General Plan has the potential to generate six significant and unavoidable impacts. CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. Significant and unavoidable impacts are in the following topic areas:

- Agricultural Land Conversion
- City Transportation Facilities
- Short-term and Long-term Air Pollutant Emissions
- Greenhouse Gases and Climate Change.

These issues are summarized below. In the instances of agricultural land conversion, City transportation facilities, and greenhouse gases and climate change, impacts are the result of an impact of both the proposed General Plan and cumulative development.[1]

While agricultural operations have slowed down in the Eastvale area for quite some time, the incorporation of the City is likely to accelerate the conversion of agricultural land to urban uses. This conversion will necessarily be limited to lands within the City limits and to a large extent the conversion was discussed in the Riverside County General Plan. As the City is of fixed geographic boundary with very limited vacant land resources and no opportunity to expand or conserve agricultural land, this impact remains significant and unavoidable.

[1] Throughout this EIR, the terms "project" or "proposed project" are used to refer to the implementation of the proposed General Plan, which will govern all development in the City over the life of the document. The term "cumulative" refers to General Plan Update *as well as* development that will happen in the surrounding region.

All of the City roadway facilities will operate acceptably, with the exception of three roadway segments:

- Etiwanda Avenue from S. Milliken Avenue to Interstate 15.
- Limonite Avenue from Hamner Avenue to Interstate 15.
- Schleisman Road from Hamner Avenue to Interstate 15.

All City roadway facilities will operate acceptably with the exception of the three roadway segments listed above even despite the implementation of proposed General Plan policy provisions which seek to improve roadway connections, increase travel choice, reduce vehicle miles traveled, support economic development, accommodate efficient goods movement, and support other community goals. As three roadway segments are projected to operate at a less than acceptable manor, this is a significant and unavoidable impact resulting from both the proposed General Plan and cumulative development.

An expanded discussion of the significant and unavoidable impacts considered to result from short and long-term air pollutant emissions is in Section 3.3. The Riverside County General Plan EIR found that despite the imposition of certain mitigation measures, both construction-related and long-term, operational impacts to air quality from implementation of the Riverside County General Plan cannot be fully mitigated to a level below significance. While the proposed Eastvale General Plan would not result in a new or substantially more severe significant impact compared with the currently adopted Riverside County General Plan, the proposed City of Eastvale General Plan does not change the existing Riverside County Land Use Map and therefore these impacts are also considered significant and unavoidable.

The significant and unavoidable impact considered to result from both the project and cumulative development in the region is in the greenhouse gas emissions analysis in Section 3.5. This is because climate change is the result of cumulative global emissions. There is no single project, when taken in isolation, that can "cause" climate change, as a single project's emissions are insufficient to change the radiative balance of the atmosphere. Because climate change is the result of greenhouse gas emissions, and greenhouse gas emissions are emitted by innumerable sources worldwide, global climate change is a significant cumulative impact of human development and activity. The global increase in greenhouse gas emissions that has occurred and will occur in the future are the result of the actions and choices of individuals, businesses, local governments, states, and nations. Therefore, the analysis in Section 3.5 addresses both project and cumulative impacts in combination.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Land Use & Agricultural Resources				
Impact 3.1.1	Implementation of the proposed General Plan would result in the conversion of agricultural land uses to nonagricultural use. However, such conversion would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR.	SU	None available.	SU
Impact 3.1.2	Implementation of the proposed project (General Plan Update and Zoning Code Update) would not result in conflicts with relevant land use planning documents within and adjacent to the City of Eastvale.	LS	None required.	LS
Impact 3.1.3	Implementation of the proposed General Plan, along with regional and statewide growth, would result in a contribution to the conversion of agricultural land uses.	CC	None available.	CC/SU
Transportation and Traffic				
Impact 3.2.1	Implementation of the proposed General Plan would result in unacceptable traffic operations on City roadway facilities.	SU	None available.	SU
Impact 3.2.2	Implementation of the proposed General Plan would not increase the severity of air traffic-related impacts or result in a new impact.	NI	None required.	NI
Impact 3.2.3	Implementation of the proposed General Plan could result in greater potential for roadway or traffic hazards.	LS	None required.	LS
Impact 3.2.4	Implementation of the proposed General Plan would result in an increase in traffic volumes, which could increase the potential opportunities for safety conflicts as well as potential conflicts with emergency access. However, implementation of the proposed General Plan would not result in inadequate emergency access.	LS	None required.	LS

S – Significant CC- Cumulatively Considerable LS – Less Than Significant SU – Significant and Unavoidable NI No Impact
PS-Potentially Significant LCC -Less than Cumulatively Considerable CS – Cumulative Significant SM- Significant but Mitigatable

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.2.5	Buildout under the proposed General Plan would result in an increase in demand for public transit services in Eastvale. However, implementation of proposed General Plan would not conflict with policies, plans, or programs supporting alternative transportation nor increase demand for transit facilities greater than planned capacity.	LS	None required.	LS
Impact 3.2.6	When considered with existing, proposed, planned, and approved development in the region, implementation of the proposed General Plan would contribute to cumulative traffic volumes in the region that result in significant impacts to level of service and operations.	CC	None available	CC/SU
Air Quality				
Impact 3.3.1	Subsequent land use activities associated with implementation of the proposed General Plan would not conflict with or obstruct implementation of the 2007 Air Quality Management Plan. The proposed General Plan also includes several policy provisions that would further assist in air quality attainment efforts.	LS	None required.	LS
Impact 3.3.2	Subsequent land use activities associated with implementation of the proposed General Plan could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	SU	None available.	SU
Impact 3.3.3	Subsequent land use activities associated with implementation of the proposed General Plan could result in long-term, operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	SU	None available.	SU

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Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.3.4	Implementation of the proposed General Plan could result in population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide (CO) emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentrations. However, traffic volumes would not be large enough to generate excessive carbon monoxide emission levels.	LS	None required.	LS
Impact 3.3.5	Subsequent land use activities associated with implementation of the proposed General Plan could result in projects that would include sources of toxic air contaminants which could affect surrounding land uses. Subsequent land use activities could also place sensitive land uses near existing sources of toxic air contaminants. These factors could result in the exposure of sensitive receptors to substantial pollutant concentrations such as toxic air contaminants. However, the SCAQMD and state regulations would address exposure to toxic air contaminants.	LS	None required.	LS
Impact 3.3.6	Subsequent land use activities associated with implementation of the proposed General Plan could include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor. However, continued implementation of current SCAQMD rules and regulations as well as proposed General Plan provisions would address this issue.	LS	None required.	LS
Impact 3.3.7	Implementation of the proposed General Plan, in combination with cumulative development in the SoCAB, would result in a cumulatively considerable net increase of ozone and coarse and fine particulate matter.	LCC	None required.	LCC

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Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Water Resources				
Impact 3.4.1	Implementation of the proposed General Plan could result in the degradation of groundwater quality and may violate water quality standards and/or degrade water quality resulting from future land uses. However, implementation of proposed General Plan policy provisions and continued implementation of current standards would ensure that groundwater quality is protected.	LS	None required.	LS
Impact 3.4.2	Implementation of the proposed General Plan could increase demand for water supply and thus require increased groundwater production, which could result in significant effects on the physical environment. However, adequate groundwater supply sources exist, and proposed General Plan policy provisions and JCSD's water conservation provisions would ensure adequate water service.	LS	None required.	LS
Impact 3.4.3	Implementation of the proposed General Plan, in combination with current land uses in the surrounding region, could introduce substantial grading, site preparation, and an increase in urbanized development. Increased development would contribute to cumulative groundwater quality impacts as well as increase the cumulative demand for water supplies.	LCC	None required.	LCC
Climate Change and Greenhouse Gases				
Impact 3.5.1	Implementation of the proposed General Plan will result in greenhouse gas emissions that would further contribute to significant impacts on the environment.	CC	None available.	CC/SU

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Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.5.2	Implementation of the proposed General Plan would not be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.) as interim SCAQMD thresholds would be surpassed.	CC	**MM 3.5.2** Add the following Implementation Item to the Air Quality and Conservation Chapter of the General Plan: "Implementation Item AQ-18.1: As funding permits the City will prepare a greenhouse gas inventory and climate action plan designed to reduce greenhouse gasses. The City may also participate in a regional climate action plan prepared by other. Until a climate action plan is adopted each project shall evaluate its impact on greenhouse gasses as part of the environmental process."	CC/SU
Public Services				
Impact 3.6.1.1	Implementation of the proposed General Plan could result in the need for additional fire protection services facilities in order to maintain acceptable service ratios and response times. The provision of these facilities could cause environmental impacts. However, future fire protection/emergency medical services facilities would be subject to project-level CEQA review at such time as an application for a project was submitted to the appropriate agency.	LS	None required.	LS

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Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.6.1.2	Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in Riverside County, could increase the demand for fire protection services and thus require additional staffing, equipment, and related facilities under cumulative conditions. The provision of these facilities could result in environmental impacts.	LCC	None required.	LCC
Impact 3.6.2.1	Implementation of the proposed General Plan would not result in increased demand for law enforcement services that would result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts.	LS	None required.	LS
Impact 3.6.2.2	Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Jurupa Valley Station service area, would increase the demand for law enforcement services and thus require additional staffing, equipment, and facilities, the construction of which could cause significant environmental impacts.	LCC	None required.	LCC
Impact 3.6.3.1	Implementation of the proposed General Plan would accommodate population growth, which could subsequently increase the use of existing parks and recreation facilities and/or require the construction or expansion of park and recreational facilities to meet increased demand.	LS	None required.	LS
Impact 3.6.3.2	Implementation of the proposed General Plan, along with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the use of existing parks and would require additional park and recreation facilities within the cumulative setting, the provision of which could have an adverse physical effect on the environment.	LCC	None required.	LCC

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Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.6.3.1	Implementation of the proposed General Plan Update would increase demand for water supply and thus require increased groundwater production, which could result in significant effects on the physical environment. However, adequate groundwater supply sources exist, and proposed General Plan Update policy provisions and Cal Water's water conservation provisions would ensure adequate water service.	LS	None required.	LS
Impact 3.6.3.2	Implementation of the proposed General Plan Update would increase demand for water supply and thus require additional water supply infrastructure that could result in a physical impact to the environment.	LS	None required.	LS
Impact 3.6.3.3	Implementation of the proposed General Plan Update, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development within the cumulative setting, would increase the cumulative demand for water supplies and related infrastructure.	LCC	None required.	LCC
Impact 3.6.4.1	Implementation of the proposed General Plan Update could result in wastewater discharge that would exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board.	LS	None required.	LS

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1.0 Introduction

1.1 PURPOSE OF THE EIR

The City of Eastvale, acting as the lead agency, has prepared this Draft Environmental Impact Report (EIR) to provide the public and responsible/trustee agencies with information about any significant environmental effects of the adoption and implementation of the proposed City of Eastvale General Plan (General Plan) and revisions to the Zoning Code (proposed project or project). As described in the State CEQA Guidelines Section 15121(a), an EIR is a public informational document that assesses significant environmental effects of the proposed project, and identifies alternatives and mitigation measures to the proposed project that could reduce or avoid its significant environmental impacts. Public agencies are charged with the duty to consider and minimize significant environmental impacts of proposed development where feasible, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA requires the preparation of an EIR prior to approving any "project" which may have a significant effect on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (State CEQA Guidelines Section 15378[a]). With respect to the proposed General Plan, the City has determined that the proposed General Plan is a "project" as defined by CEQA.

1.2 KNOWN TRUSTEE AND RESPONSIBLE TRUSTEE AGENCIES

For the purpose of CEQA, the term "trustee agency" means 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. The California Department of Fish and Game is a trustee agency with regard to the fish and wildlife of the state and designated rare or endangered native plants.

In CEQA, the term "responsible agency" includes all public agencies other than the lead agency that may have discretionary actions associated with the implementation of the General Plan or an aspect of the project. The following agencies may have some role in implementing the General Plan and have been identified as potential responsible agencies:

- California Department of Conservation
- California Department of Forestry and Fire Protection
- California Department of Parks and Recreation
- California Department of Water Resources
- California Department of Resources Recycling and Recovery
- California Public Utilities Commission
- California State Lands Commission
- California Transportation Commission
- Caltrans District 8, Environmental Planning and Engineering

- Caltrans, Division of Aeronautics
- Corona-Norco Unified School District
- Jurupa Area Recreation and Park District
- Jurupa Community Services District
- Riverside County Airport Land Use Commission
- Riverside County Local Agency Formation Commission
- Riverside County Transportation Commission
- Santa Ana Regional Water Quality Control Board
- South Coast Air Quality Management District
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

1.3 TYPE OF DOCUMENT

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a "program EIR" pursuant to CEQA Guidelines Section 15168:

> *A program EIR is a first-tier 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) As 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.*

The program level analysis in this EIR considers the broad environmental effects of the overall proposed General Plan. This EIR will be used to evaluate subsequent projects (public and private) under the proposed General Plan consistent with CEQA and the State CEQA Guidelines. When individual projects or activities under the General Plan are proposed, the City will be required to examine the projects or activities to determine whether their effects were adequately analyzed in this EIR. If the projects or activities would have no effects beyond those analyzed in this EIR, no further environmental review would be required.

1.4 INTENDED USES OF THE EIR

This EIR is intended to evaluate any significant environmental impacts of adoption and implementation of the General Plan. The EIR will serve as a source of information in the review of subsequent planning and development proposals, including subsequent environmental review of specific plans, for infrastructure provision and individual development proposals, and for public facilities to serve new development. In addition, this EIR may be used by the City to support adoption of CEQA significance thresholds pursuant to State CEQA Guidelines Section 15064.7(b).

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.

The environmental issues addressed in the Draft EIR were established through review of the project, environmental documentation for nearby projects, and public and agency responses to the Notice of Preparation (NOP).

This Draft EIR is organized as follows:

ES – EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts, proposed General Plan policies, possible mitigation measures, and identification of alternatives that reduce or avoid at least one environmental effect of the proposed General Plan.

SECTION 1.0 – INTRODUCTION

Section 1.0 provides an introduction and overview describing the purpose, type, and intended use of the EIR, responsible agencies, organization and scope of the EIR, the review and certification process, and a summary of comments received on the NOP.

SECTION 2.0 – PROJECT DESCRIPTION

This section provides a detailed description of the proposed project, including the location, intended objectives, background information, the physical and technical characteristics including the decisions subject to CEQA and a list of related environmental review and consultation requirements.

SECTION 3.0 – ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Section 3.0 contains an analysis of environmental topic areas as identified below. Each subsection contains a description of the existing setting of the project area, identifies project-related impacts, and identifies mitigation measures for significant environmental effects.

This section also includes an introduction to the environmental analysis that describes the general assumptions used to evaluate project-specific and cumulative environmental impacts. However, specific analyses are provided in each environmental issue area section.

The following major environmental topics are addressed in this section:

- Land Use/Agricultural Resources
- Transportation and Traffic
- Air Quality
- Water Resources
- Greenhouse Gases and Climate Change
- Public Services

SECTION 4.0 – CUMULATIVE IMPACTS SUMMARY

This section summarizes all identified cumulative impacts associated with the proposed project. As required by State CEQA Guidelines Section 15130, an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable.

SECTION 5.0 – ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project. This alternatives analysis provides a comparative analysis between the merits of the project and the selected alternatives.

SECTION 6.0 – LONG-TERM IMPLICATIONS OF THE PROJECT

This section contains discussions and analyses of various topical issues as mandated by CEQA. These include significant environmental effects that cannot be avoided if the project is implemented, significant irreversible environmental changes and growth-inducing impacts.

SECTION 7.0 – REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as all technical material prepared to support the analysis.

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR will involve the following general procedural steps:

NOTICE OF PREPARATION

In accordance with Section 15082 of the CEQA Guidelines, the City prepared an NOP of an EIR for the project on November 21, 2011. The City was identified as the lead agency for the proposed project. This notice was circulated to public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed project. A scoping meeting was held on December 15, 2011, to receive comments.

The City received the following written comments during the public review period for the NOP:

1) Native American Heritage Commission, November 28, 2011

2) Riverside County, Airport Land Use Commission, December 8, 2011

3) California Emergency Management Agency, December 12, 2011

4) Pala Tribal Historic Preservation Office, December 15, 2011

5) City of Ontario, December 20, 2011

6) California Regional Water Quality Control Board, December 22, 2011

Issues raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and responses by interested parties are presented in **Appendix 1.0-1**.

DRAFT EIR AND PUBLIC NOTICE/PUBLIC REVIEW

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives. This Draft EIR, as well as the General Plan and Zoning Code, is available at the City of Eastvale (see address below) as well as online at www.EastvaleGeneralPlan.com.

Comments will also be accepted via an online comment form at the website listed below from March 16, 2012 through April 30, 2012 . All comments or questions regarding the Draft EIR should be addressed to:

Eric Norris
City of Eastvale
12363 Limonite Avenue, Suite 910
Eastvale, CA 91752
ENorris@ci.eastvale.ca.us

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments made at any public hearing(s) as well as contain any minor edits made to the Draft EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

As the final decision maker regarding the General Plan, the City Council will review and consider the Final EIR. If the Council finds that the Final EIR is "adequate and complete," it will certify the Final EIR.

Following certification of the Final EIR and following a recommendation on the proposed General Plan by the Planning Commission, the City Council may take action to adopt, revise, or reject the General Plan. A decision to approve the project would be accompanied by written findings in accordance with State CEQA Guidelines Section 15091 and Section 15093 and would explain the General Plan's relationship to alternatives considered in this EIR. A Mitigation Monitoring and Reporting Program (MMRP), as described below, would also be adopted for mitigation measures incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This MMRP will be designed to ensure that these measures are carried out during General Plan implementation.

MITIGATION MONITORING

Public Resources Code Section 21081.6(a) requires lead agencies to adopt a mitigation monitoring and reporting program to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The specific "reporting or monitoring" program required by CEQA is not required to be included in the EIR; however, it will be presented to the City Council for adoption. Throughout the EIR, however, mitigation measures have been clearly identified and presented in language that will facilitate establishment of a monitoring and reporting program.

2.0 Project Description

2.1 LOCAL AND REGIONAL SETTING

PROJECT LOCATION

The City of Eastvale is located in western Riverside County, California, in a region of Southern California known as the Inland Empire. The General Plan addresses a "Planning Area" that includes all land within the City's incorporated boundaries. The City Planning Area encompasses approximately 8,408 acres and is bound by the City of Chino to the west, the City of Ontario roughly to the north, the Santa Ana River and the City of Norco to the south, and Interstate 15 (I-15) and the City of Jurupa Valley to the east (see **Figure 2.0-1**).

PROJECT SETTING

The topography of Eastvale is characterized as a slightly undulating flatland. Located along the southern boundary of Eastvale, the Santa Ana River represents a significant watershed, recreational, habitat and visual resource. The Santa Ana River flows southwest toward the Prado Dam, and serves as a prominent natural buffer between Eastvale and the City of Norco. Several natural and channelized drainage courses connect with the river.

The surrounding Chino Valley is known for agriculture. Dairies are the predominant agricultural uses in Eastvale, though ranches and row crops are also found. With development the character of Eastvale is changing from an agricultural to a more urbanized community. Land uses found in Eastvale include residential, commercial, public facilities, and agricultural.

The road network in Eastvale is anchored by I-15, Cloverdale Road/Limonite Avenue, Schleisman Road, Hamner Avenue, and Hellman Avenue (a major roadway that forms the westernmost boundary of Eastvale). Several arterial and collector roads branch off from these major roadways and serve local uses. The Chino Airport is located northwest of Eastvale. The closest commercial airline service to Eastvale is available at Ontario International Airport, located approximately 10 miles north of Eastvale.

2.2 BACKGROUND AND HISTORY OF THE GENERAL PLAN PROCESS

On October 1, 2010, the City of Eastvale was incorporated and the newly formed City Council elected to use the Riverside County General Plan (2003) and County Ordinances (2010) to function as the City of Eastvale General Plan (General Plan) and municipal code.

The Riverside County General Plan contains supporting planning documents, namely the Eastvale Area Plan, as well as extensive objectives, policies, and programs designed to identify and address the environmental impacts of development within Eastvale over the long term.

Pursuant to state law, the City is required to adopt its own General Plan within 30 months of incorporation (April 2013). As directed by the City Council, the development of a new General Plan was initiated by City staff.

The City of Eastvale extensive public outreach for the proposed General Plan to understand the needs and desires of the community and to identify and discuss concerns and issues throughout the General Plan process. A summary of those efforts is provided below.

- **General Plan Advisory Committee (GPAC)**. The GPAC comprised 10 members. Seven of the members were Eastvale residents, and the three others were representatives from the

building industry, the Eastvale Planning Commission and the Eastvale Chamber of Commerce. The GPAC provided feedback on key issues, guiding principles, land use alternatives, and policies for the General Plan.

- **Social Media (Facebook and Twitter)**. City of Eastvale residents rely heavily on the internet and social networking sites for information and community-building. Recognizing this, the City included Facebook and Twitter as part of its effort to reach out to citizens that otherwise would not be informed of important information regarding the General Plan.

- **General Plan Website.** The City set up a General Plan website (www.eastvalegeneralplan.com) that informed residents of meeting and workshop dates as well as draft and final documents available for review.

- **Meetings with Stakeholders.** The City identified many stakeholder groups in the community with wide-ranging interests, and facilitated meetings to solicit input and ideas about key issues.

- **Press Coverage.** The City circulated press releases throughout the General Plan process to help distribute information about and build interest in the planning process.

- **Meetings and Public Hearings at the Planning Commission and City Council.** The City held both Planning Commission and City Council meetings throughout the General Plan process. Meetings were held to introduce the General Plan and to seek comments from the Commission.

2.3 OBJECTIVES OF THE GENERAL PLAN

REQUIREMENT TO ADOPT A GENERAL PLAN

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning.

The general plan is required to address the following mandatory elements: land use, circulation, housing, air quality and conservation, open space, noise, and safety. A city or county may also adopt additional elements.

A general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for each area addressed in the plan. The general plan is a long-range document that typically addresses the physical development of an area over a 20-year period.

Although the general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

The City of Eastvale recognizes and acknowledges the ability of planning to affect the quality of lives of residents, the success of the local economy, the appearance of the community, the

ability of Eastvale to respond to changing economic circumstances, and the extent to which the City can help in statewide and national efforts to reduce energy consumption and greenhouse gas emissions. In light of these potential effects, the Eastvale General Plan embodies several guiding principles:

- **Be proactive** by addressing important issues as early as possible, when the City's actions can have the most effect;
- **Think ahead** by working to identify important issues and to continually seek out the best practices of other cities and communities and implement them in a way that is meaningful to Eastvale;
- **Support Eastvale's transition** from a "building" mode to a "maintain and sustain" mode, while retaining its sense of community;
- **Embrace diversity** in all aspects of the City—its people, its housing, its economy—in recognition of the strength and flexibility the City provides; and
- **Ensure the long-term viability of the City of Eastvale** both from an economic standpoint and from the perspective of the physical systems—land, water, air, and so forth—critical to a healthy city.

The proposed project will result in a new General Plan that blends existing (County of Riverside) goals and policies and new, Eastvale-specific goals and policies. A list of the specific issues that the new General Plan is intended to address is shown below (project objectives):

- **Transitioning the City from a "building" mode to a "maintain and sustain" mode.**
- **Maintaining the City's viability and desirability over time.**
- **Addressing issues of health and wellness.**
- **Maintaining the City's physical and economic systems over time.**

The City has decided to retain all of the existing land use designations in the current Riverside County General Plan and, similarly, roadway classifications and other physical planning in the Riverside County General Plan will remain unchanged. The analysis of this Draft Environmental Impact report (Draft EIR) focuses only on the *changes* between the currently adopted Riverside County General Plan and the proposed new General Plan. Most of the proposed changes are advisory or procedural in nature and not likely to cause any environmental impact.

2.4 GENERAL PLAN COMPONENTS AND CHARACTERISTICS

The proposed project consists of adoption of a new General Plan for the City of Eastvale. The proposed General Plan will be based on the City's currently adopted Riverside County General Plan, but will be tailored to reflect the current conditions of the City and to better address those issues that affect the City. No changes are proposed to the existing land use or circulation maps. The proposed General Plan will consist of the seven required element) as well as four optional elements, as described below.

LAND USE ELEMENT (REQUIRED)

The Land Use Element provides policies to guide potential short- and long-term changes in land use within existing neighborhoods. No changes to the City's current Land Use Map are proposed. The proposed Land Use Map, which is the same as the current Land Use Map, is shown in **Figure 2.0-2.**[1] This element also discusses the need for, and potential general locations of, civic facilities, including a civic center (city hall, police station, etc.).

The Land Use Element identifies three future planning areas, described in more detail below, that represent potential development for the City. While the General Plan designations for these areas will not change as a result of this project, the City recognizes that each of the areas would benefit from master plan, specific plan or similar individualized development strategy.

CIRCULATION ELEMENT (REQUIRED)

The Circulation Element provides policies to promote "connectivity" to better link the City's neighborhoods and the use of streets for multiple uses (i.e., "complete streets"). This element also establishes the City's Level of Service policies, and addresses issues related to freight and goods movement. Future work identified in the element includes re-examining the vehicular Level of Service and discussing the potential for balancing vehicular Level of Service with pedestrian, cycling and public transit options. The roadway classifications and other physical planning in the Riverside County General Plan will remain unchanged and current level of service standards are also not changed with the proposed new General Plan. The proposed Circulation Plan is shown in **Figure 2.0-3.**

DESIGN ELEMENT (OPTIONAL)

The Design Element establishes a basic level of design quality for new public and private development that can be applied to residential and nonresidential projects. The Design Element also addresses pedestrian/bicycle features for new projects.

ECONOMIC DEVELOPMENT ELEMENT (OPTIONAL)

The Economic Development Element establishes long-term economic policies for the City. The element focuses on retaining businesses and promoting future economic growth. Future work identified includes a continuing review of the City's regulations and examining long-term infrastructure maintenance needs.

AIR QUALITY AND CONSERVATION ELEMENT (REQUIRED)

The Air Quality and Conservation Element provides the policy context for the city to achieve its vision for air quality, greenhouse gas reduction, and conservation. Specifically, this element addresses issues of energy conservation in both the City's operations and private development, and provides policies related to "low-impact" or "green" development. It also includes policy provisions to help create more sustainable and energy-efficient development and to address state-mandated issues of greenhouse gases (per Assembly Bill 32).

[1] The City has amended the General Plan Land Use Map for several projects since incorporation. Each of these amendments were accompanied by individual environmental analyses.

FIGURE 2.0-1 EASTVALE PLANNING AREA AND REGIONAL LOCATION

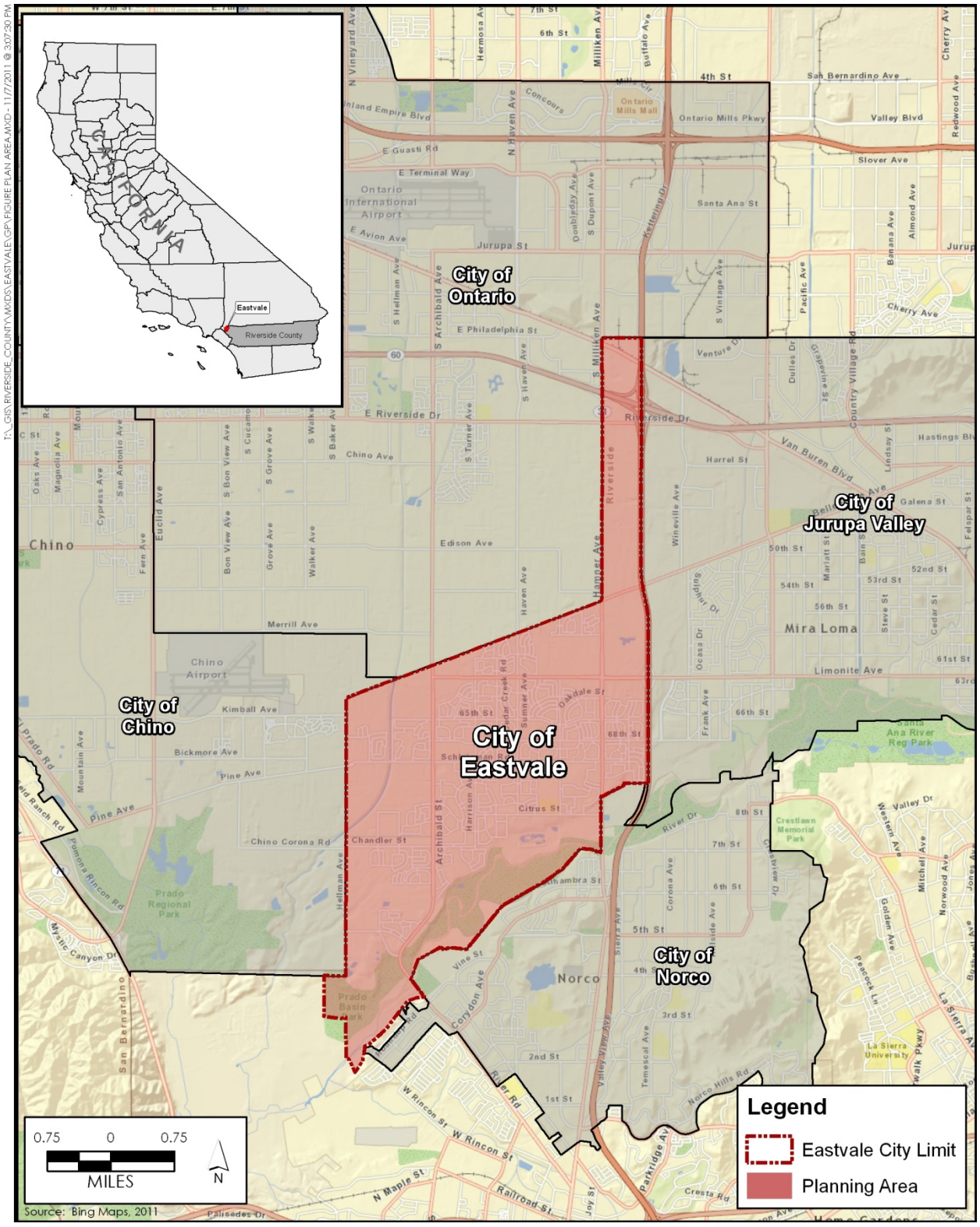

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FIGURE 2.0-2 GENERAL PLAN LAND USE MAP

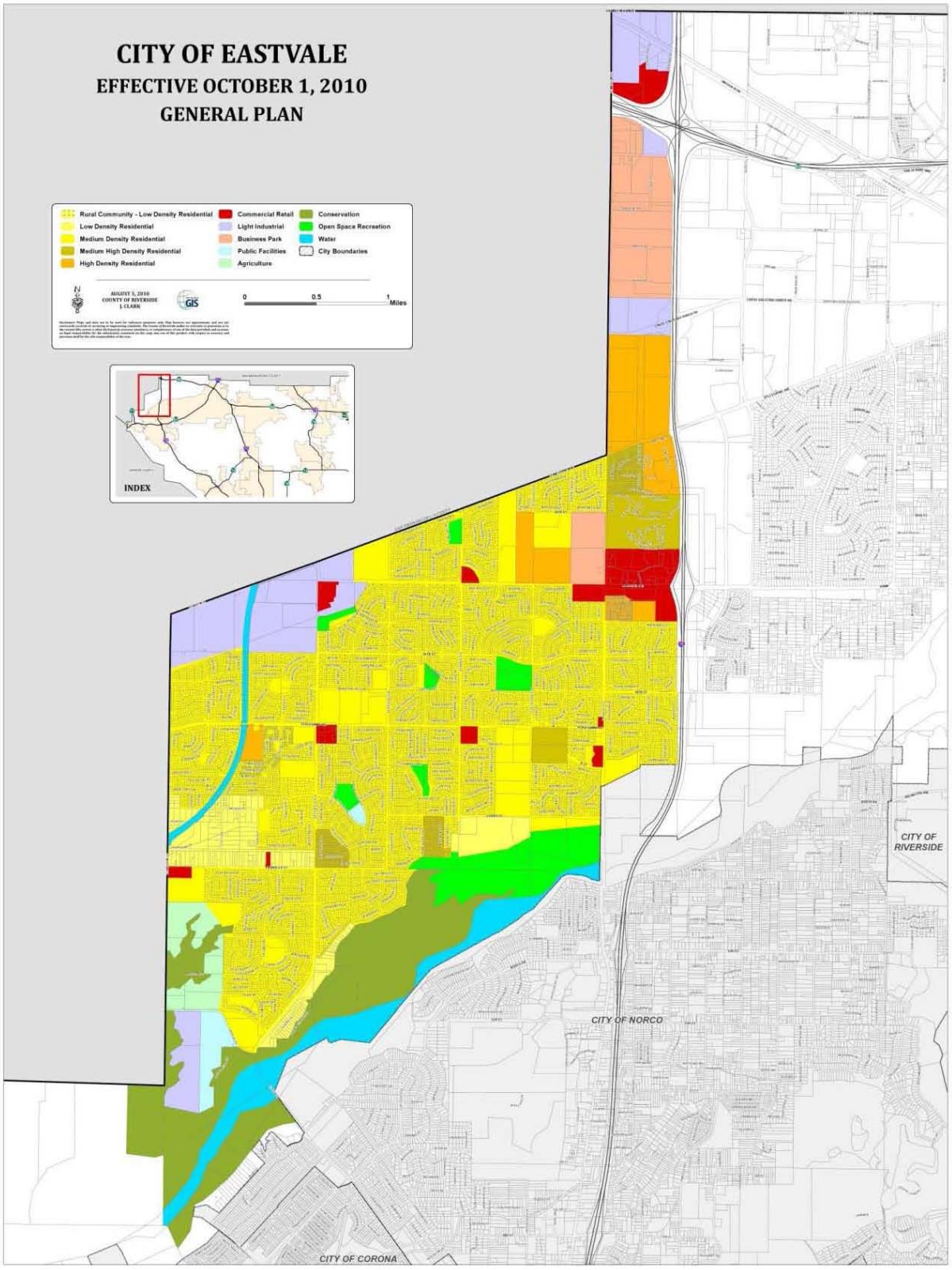

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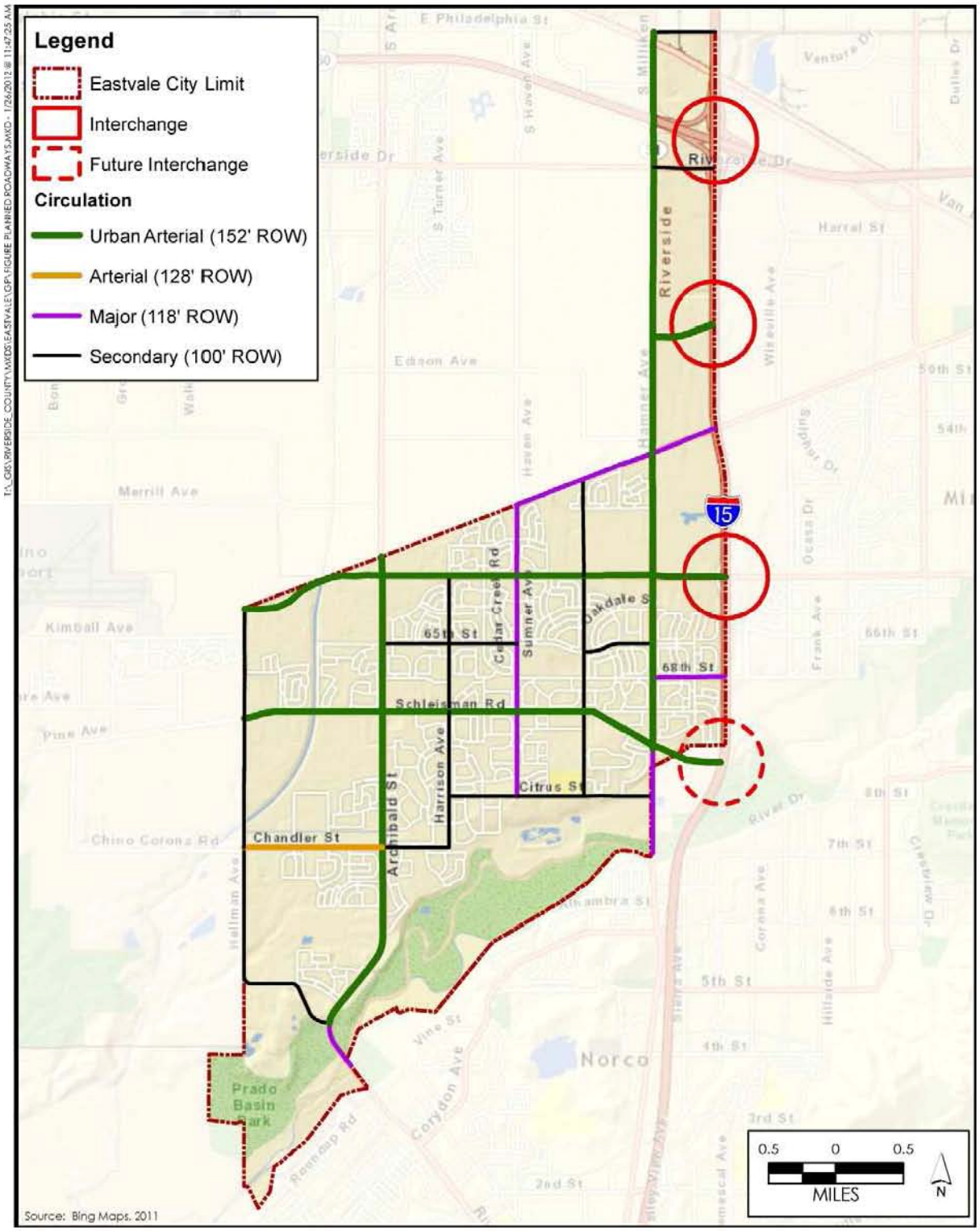
FIGURE 2.0-3 GENERAL PLAN CIRCULATION MAP



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HEALTHY COMMUNITY ELEMENT (OPTIONAL)

The Healthy Community Element addresses issues of community health with connections to the Circulation, Land Use, Safety, and Economic Development elements.

HOUSING ELEMENT (REQUIRED)

The Housing Element identifies and establishes the City's policies with respect to meeting the requirements of state law to accommodate housing for households at all income levels. It establishes policies that will guide City decision-making and sets forth an action plan to implement the City's housing goals.

NOISE ELEMENT (REQUIRED)

The Noise Element addresses issues of noise-sensitive land uses, noise producers, noise attenuation, vibration, noise-mitigating strategies, and building and design techniques. The element provides future noise levels for major roadways based on the current General Plan (Riverside County General Plan) and includes policies for determining whether a proposed use is consistent with noise levels. The element also includes policies describing how the City will ensure that noise levels do not affect sensitive uses, and conversely how noise-producing uses are protected from encroachment by uses sensitive to noise.

PARKS, RECREATION, AND OPEN SPACE ELEMENT (REQUIRED)

The Parks, Recreation, and Open Space Element addresses the provision of parks and open space and supports existing and new park and recreation facilities. Future planning efforts identified in this element include the preparation of a citywide parks and trail system.

SAFETY ELEMENT (REQUIRED)

The Safety Element addresses issues of safety related to known hazards (e.g., flooding, seismic activity, truck traffic, Chino Airport) as well as the use of "safe routes" to schools for children.

SUSTAINABILITY ELEMENT (OPTIONAL)

The Sustainability Element provides a policy framework of EEE: Sustainable Environment, Economy, and Equity to provide guidance for responsible choices that allow for the continued success of the community.

2.5 GENERAL PLAN LAND USE CONCEPT

While implementation of the proposed General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development, such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR, as the proposed City of Eastvale General Plan would not include changes to the existing land use map. While it is important to note that the General Plan Land Use Map has been amended with individual projects since incorporation, those changes are reflected in the final Land Use Map included in the proposed Eastvale General Plan and are not analyzed in the in this EIR since each of these amendments are already accompanied by individual environmental analyses.

As of year 2012, it is estimated that approximately 80 to 90 percent of the city's residential areas will have already been built. With even a modest rebound in the regional economy, build-out of Eastvale could easily occur with the next decade—certainly within the timeframe that can be expected to be spanned by the proposed General Plan. Therefore, the land use concept in the General Plan has been developed to approach the change in emphasis from youth and construction to maintenance and maturity. As this occurs, the City's focus will shift from being primarily centered on ensuring the quality of new development to ensuring that the developed neighborhoods, retail centers, and industrial areas remain desirable and able to compete with other, newer neighborhoods in other cities. This will involve watching demographic and economic trends that will affect the types of homes that families will want to buy and live in (and whether they want to buy or rent), how they will want to shop, and what types of jobs are needed, and adjusting land use and other policies as needed.

The land use concept in the General Plan has been developed to address this change, and begins to chart a future path for Eastvale both on a local and regional level. The General Plan addresses the following issues specific to Eastvale and its future:

- The transition likely to occur during the lifetime of the General Plan from a growing city to an almost entirely built-out city which must focus not on the quality of new growth but on maintaining the neighborhoods, commercial areas, and industrial uses already in existence.

- Creating a mix of land uses that meets the needs of Eastvale's residents, including a wider variety of housing choices that respond to demographic changes (e.g., an aging population).

- Seeking opportunities for additional City revenues through the creation of job- and revenue-generating land uses.

- Focused look at land uses in the north-of-Chandler area, Leal Property, and Swan Lake.

- Additional locations for multifamily housing.

- Examine potential short- or long-term changes in land use within neighborhoods (at a written policy level), including the adaptive reuse of existing housing stock in response to changes in demographics and the housing market.

- Determine the need for and potential general locations of civic facilities, including a civic center (city hall, police station, etc.).

The General Plan establishes seven key land use goals to aid in addressing these issues:

Goal LU-1: Eastvale is a well-planned city which balances growth demands with resources and infrastructure to facilitate high-quality development.

Goal LU-2: A balance of land uses that maintains and enhances the City's fiscal viability, economic diversity, and environmental integrity, and meets the needs of Eastvale's residents.

Goal LU-3: A wide variety of ownership and rental housing choices that responds to changes in demographics and homebuyer preferences.

Goal LU-4: An improved Chandler Area that provides a better environment for residents and businesses through a comprehensive planning process.

Goal LU-5: A "downtown" or "city center" for Eastvale containing a mix of civic, office, retail, and residential uses.

Goal LU-6: Maintaining and improving the quality of Eastvale's residential, commercial, and industrial areas over the lifetime of the General Plan.

Goal LU-7: Land use patterns and transportation systems that encourage physical activity, promote healthy living, and reduce chronic illnesses.

The proposed General Plan focuses these planning efforts throughout Eastvale. In addition, the proposed General Plan uses "future planning areas" to identify general goals for detailed, comprehensive plans at the Chandler area, Leal Property, and Swan Lake area. The proposed General Plan supports long-range planning for these areas in order to identify potential new uses or the potential rehabilitation of existing neighborhoods. A description of these future planning areas is as follows:

- **The Chandler Area.** The Chandler Area is named for the roadway that forms the City's southern boundary. The Chandler Area contains a mix of uses that reflect the community's agricultural heritage, including homes, agricultural-related businesses, horse corrals, barns, etc. Reflecting the community's age—and the more relaxed planning standards of the time when the area developed—the Chandler Area today contains many examples of homes in need of improvement as well as a variety of potentially incompatible land uses adjacent to each other (e.g., homes, trucking yards, and horse corrals coexist in the Chandler Area.)

- **Swan Lake.** Swan Lake is a mobile home community originally founded as a senior-only housing development in the 1960s, which existed for many years as an enclave of development in the midst of the dairies. Decades after its founding, Swan Lake became non-age-restricted, and currently provides relatively low-cost housing for families (signs for Swan Lake advertise the availability of mobile homes for sale for about 1/20th the cost of a typical single-family home in Eastvale). Many of the housing units in Swan Lake are in need of repair, and there are many vacant spaces from which mobile homes have been removed and not replaced.

- **The Leal Property.** This property, named for the site's owner, is an approximately 170-acre area at the northwest corner of Limonite and Hamner avenues. Once the site of an operating dairy and horse ranch, the Leal Property today is the home of Mr. Leal and his family and a few remaining dairy cattle and horses. Centrally located in Eastvale at the intersection of two major roadways and under a single ownership, the Leal Property represents a significant development opportunity.

LAND USE MAP

Figure 2.0-2 shows the General Plan Land Use Map, which has been retained from the existing land use designations in the current Riverside County General Plan. **Figure 2.0-2** depicts the land use policy of the City of Eastvale and is an illustration of the City's land use policy for all of the lands in the city.

PROPOSED GENERAL PLAN BUILD-OUT PROJECTIONS

Table 2.0-1 summarizes the residential build-out projections of the General Plan Planning Area under the proposed General Plan Land Use Map. Because the proposed City of Eastvale General Plan will not include changes to the existing land use map, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed General Plan. Build-out assumptions for Eastvale would be the same as the build-out assumptions for Eastvale in the 2003 Riverside County General Plan.

TABLE 2.0-1
SUMMARY OF GENERAL PLAN RESIDENTIAL BUILD-OUT CONDITIONS

Residential Build-Out	Total Build-Out Condition
Residential Units	17,720
Population	61,698

[1] Forecasts are sourced from the Riverside County Transportation Analysis Model (RivTAM). RivTAM is the county's travel demand model and accounts for ambient growth and approved future development throughout the County of Riverside. As the proposed General Plan keeps the existing land use designation and zone districts, the City is also ensuring that the Riverside County Regional Traffic model remains current for its assumptions about growth in the City of Eastvale.

Currently (2012), commercial land uses constitute approximately three percent of the city while office land uses and industrial land uses make up five and eight percent, respectively. It is anticipated that the same or similar ratio of commercial, office, and industrial land uses that currently exist within Eastvale will exist under build-out conditions.

There are several land uses identified on the proposed General Plan Land Use Map with zero designated acreages (e.g., Very High-Density Residential, Commercial Tourist, Heavy Industrial, Town Center, etc.). These land use designation will become available within the city in the future. A key issue to be addressed in the future includes land use designation changes. There are three specific areas (the Chandler Area, Swan Lake, and the Leal Property described above) for which the City would like to develop a detailed plan for future development and revitalization. Embarking on this process will require additional funding that has not been identified at this time.

ZONING CODE AMENDMENTS

The proposed project also includes revisions to the City's Zoning Code. The current code is the Riverside County Zoning Ordinance (Ordinance 348) which was adopted upon Eastvale's incorporation. The proposed changes to the Code are reflected in **Appendix 2.0-1**, and follow a similar approach to that of the General Plan. The proposed Zoning Code update does not make significant changes to the Riverside County Zoning Ordinance, but revises the Code to better reflect local issues and to address the latest requirements of state law. A summary of the changes to the Zoning Code include:

- The reorganization of the Zoning Code into six chapters compared to the 23 "Articles" in the Riverside County Zoning Ordinance. These six chapters are organized as follows:
  - Chapter 1: Administration and Procedures
  - Chapter 2: Land Use Permits and Entitlements

  - Chapter 3: Zoning Districts
  - Chapter 4: Standards Related to Specific Uses
  - Chapter 5: Development Standards
  - Chapter 6: Glossary
- The reorganization of the Zoning Code into these six chapters focused on four basic topics:
  - Formatting and Structural Changes – Reorganizing the existing Zoning Code to assemble similar topics into one location.
  - Streamlining – Removing unnecessary and redundant information to make the Zoning Code shorter and more focused on important topics.
  - Entitlements – Updating the way projects are reviewed and approved to better reflect Eastvale issues and concerns.
  - Development Standards – Making limited changes to development standards to help the Zoning Code function better at a city level of detail (as opposed to a county level).

2.6 INTENDED USES OF THE EIR AND APPROVAL PROCESS

The General Plan will be presented to the City of Eastvale Planning Commission for review, comment, and recommendations. The City of Eastvale City Council, as the City's legislative body, is the approving authority for the City of Eastvale General Plan. In order to approve the General Plan, the City Council must take the following actions:

- Certification of the City of Eastvale General Plan EIR.
- Adoption of required findings for the above actions, including required findings under the State CEQA Guidelines, Sections 15090, 15091, and 15093.
- Adoption of the City of Eastvale General Plan.
- Adoption of the update to the City of Eastvale Zoning Code

2.7 OTHER PLANNING ACTIVITIES RELATED TO THE PROPOSED GENERAL PLAN

HABITAT CONSERVATION PLAN/NATURAL COMMUNITY CONSERVATION PLAN

Future development projects would be subject to the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) which is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats (including riparian/riverine habitat, vernal pools, and wetlands) in western Riverside County. Compliance with the requirements of the MSHCP will ensure that any adverse effects to protected species and associated habitats would be minimized and mitigated. Future development projects would also be subject to project-level CEQA review which ensures that

impacts to biological resources are avoided or minimized and, where necessary, mitigated to a less than significant level.

OTHER PUBLIC AGENCY APPROVALS

Additional subsequent approvals and permits that may be required from local, regional, state, and federal agencies in the processing of subsequent development permits include, but are not limited to, the following:

- South Coast Air Quality Management District approval of dust control plans and other permits for subsequent projects.
- California Department of Transportation approval of improvements and/or funding for future improvements associated with state highway facilities.
- Extension of service and/or expansion of infrastructure facilities by the City or other providers.
- Riverside County Airport Land Use Commission review of any activity impacting the Chino Airport.
- California Department of Fish and Game approval of potential future streambed alteration agreements, pursuant to the Fish and Game Code. Approval of any future potential take of state-listed wildlife and plant species covered under the California Endangered Species Act.
- Santa Ana Regional Water Quality Control Board (RWQCB) and State Water Resources Control Board review and/or approval of any activity impacting the Santa Ana River or other water features, pursuant to the Clean Water Act and RWQCB standards.
- U.S. Army Corps of Engineers approval of any future wetland fill activities, pursuant to the federal Clean Water Act.
- U.S. Fish and Wildlife Service approval involving any future potential take of federally listed wildlife and plant species and their habitats covered under the federal Endangered Species Act.
- U.S. Environmental Protection Agency concurrence with Section 404 of the Clean Water Act permit.

REFERENCES

Riverside County. 2003a. 2003. *County of Riverside General Plan Eastvale Area Plan*.

———. 2003b. 2003. *Riverside County General Plan*.

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

ANALYSIS ASSUMPTIONS USED TO EVALUATE ANY SIGNIFICANT ENVIRONMENTAL IMPACTS OF THE CITY OF EASTVALE GENERAL PLAN

BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR

The environmental setting of the City of Eastvale is described in the individual technical sections of this Draft EIR (see Sections 3.1 through 3.6). In general, these sections describe the conditions of the City of Eastvale as they existed when the Notice of Preparation (NOP) for the project was released on November 21, 2011. In addition, the Draft EIR also includes any setting information that may have been updated since the release of the NOP.

PROJECTED BUILD-OUT CONDITIONS ASSOCIATED WITH PROPOSED GENERAL PLAN

Future growth in the City of Eastvale is guided by the land uses identified in the proposed General Plan Land Use Map (see **Figure 2.0-2**). The proposed General Plan retains the existing land use designations and zone districts in the current Riverside County General Plan and zoning ordinance. Similarly, roadway classifications and other physical planning in the Riverside County General Plan remain unchanged under the proposed General Plan.

The build-out projections of the General Plan Planning Area under the proposed new General Plan Land Use Map are the same as projected under the existing Riverside County General Plan, as the proposed City of Eastvale General Plan will not include changes to the existing Land Use Map. Therefore, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed General Plan.

Table 3.0-1 below summarizes total housing, population and job numbers for the proposed General Plan build-out conditions, which are a combination of existing development conditions in 2012 and future development projections. As of 2012, it is estimated that approximately 80 to 90 percent of the city's residential areas have already been built. While this General Plan was prepared with a time horizon of at least 20 years, with even a modest rebound in the regional economy, build-out of Eastvale could easily occur with the next decade, and certainly within the proposed General Plan's expected 20-year timeframe.

TABLE 3.0-1
BUILD-OUT CONDITIONS FOR THE PROPOSED GENERAL PLAN

Housing and Job Factor	Total Build-Out Condition
Residential Units	17,720
Population	61,698
Total Jobs	6,973

[1] *Forecasts are sourced from the Riverside County Transportation Analysis Model (RivTAM). RivTAM is the county's travel demand model and accounts for ambient growth and approved future development throughout the County of Riverside. As the proposed General Plan keeps the existing land use designation and zone districts, the City is also ensuring that the Riverside County Regional Traffic model remains current for its assumptions about growth in the City of Eastvale.*

Currently (2012), commercial land uses constitute approximately three percent of the city while office land uses and industrial land uses make up five and eight percent, respectively. It is anticipated that the same or similar ratio of commercial, office, and industrial land uses that currently exist within Eastvale will exist under build-out conditions. As stated in Section 2.0, Project Description, the proposed General Plan sets out a number of future planning goals, but due to

the loss of state revenues, the City lacks the resources to complete these tasks at this time. A key issue to be addressed in the future includes land use designation changes. There are three specific areas (the Chandler Area, Swan Lake, and the Leal Property, described in Section 2.0) for which the City would like to develop a detailed plan for future development and revitalization. Embarking on this process will require additional funding that has not been identified at this time.

It is important to note that the future development of specific planning goals for the Chandler Area, Swan Lake, and the Leal Property could affect the projections of total housing, population and job numbers for the proposed General Plan build-out conditions identified in **Table 3.0-1**. However, since detailed plans for future development and revitalization at these areas do not yet exist, this Draft EIR analysis is reflective only of the build-out conditions identified in **Table 3.0-1**.

REGIONAL TRAFFIC MODEL

In keeping the existing land use designation and zone districts, the City is also ensuring that the Riverside County Regional Traffic model remains current for its assumptions about growth in the City of Eastvale. This Draft EIR assumes that the Traffic Allocation Zones used in the regional model are based on the Riverside County Land Use Map. Traffic model outputs from the regional traffic model were used for the analysis of existing and future Levels of Service (LOS).

STRUCTURE OF THE ENVIRONMENTAL IMPACT ANALYSIS

Sections 3.1 through 3.6 of this Draft EIR contain a detailed description of current setting conditions (including applicable regulatory setting), an evaluation of the direct and indirect environmental effects resulting from the implementation of the proposed General Plan, identification of proposed General Plan goals and policies, and City of Eastvale Municipal Code sections that mitigate environmental effects. Furthermore, Sections 3.1 through 3.6 of this Draft EIR contain additional feasible mitigation measures and identify whether significant environmental effects of the project would remain after application of proposed goals, policies, and feasible mitigation measures. The individual technical sections of the Draft EIR include the following information:

Existing Setting

The existing setting is based on conditions as they existed when the NOP for the proposed General Plan was released on November 21, 2011.

Regulatory Framework

This subsection identifies applicable federal, state, regional, and local plans, policies, laws, and regulations that apply to the technical area of discussion.

Impacts and Mitigation Measures

Because of the programmatic nature of this document, the mitigation measures necessarily take the form of actions to be performed when later, more project-specific proposals are considered.

APPROACH TO THE CUMULATIVE IMPACT ANALYSIS

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project when the project's effect is considered cumulatively considerable. Each technical section in the Draft EIR considers whether the project's effect on anticipated cumulative setting conditions is cumulatively considerable (i.e., a significant effect). "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (CEQA Guidelines, Section 15065(a)(3)). The determination of whether the project's impact on cumulative conditions is considerable is based on a number of factors including consideration of applicable public agency standards, consultation with public agencies, and expert opinion. The environmental effects of potential development within the City of Eastvale are incorporated in the cumulative impact analysis contained within each technical section. In addition, Section 4.0, Cumulative Impacts Summary, provides a summary of the cumulative impacts associated with the General Plan.

Definition of Cumulative Setting

State CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project when the project's effect is considered cumulatively considerable. In general, the cumulative setting conditions considered in this Draft EIR are based on:

Local Adopted General Plans. The existing land use plans in the Eastvale region, including those of Riverside County and the cities of Chino and Ontario.

Large-Scale Development Projects. Consideration of large-scale proposed and approved development projects listed in **Table 3.0-2**. This list of projects is intended to describe large-scale proposed, approved, and reasonably foreseeable future development activities in the Eastvale region that, when considered with the proposed General Plan, have the potential to have cumulatively considerable impacts. It is not intended to be an all-inclusive list of projects in the Eastvale region.

Effect of Regional Conditions. Consideration of background traffic volumes and patterns on highways (e.g., Interstate 15), background air quality conditions, and other associated environmental conditions that occur within the Inland Empire, both within and outside of the City.

Consideration of Existing Development Patterns. Consideration of the current environmental conditions of existing development and past land use activities in the region.

Each technical section of the Draft EIR includes a description of the geographic extent of the cumulative setting based on the characteristics of the environmental issue under consideration as set forth in Section 15130(b) of the State CEQA Guidelines.

TABLE 3.0-2
LARGE-SCALE DEVELOPMENT PROJECTS

Project Name	Project Description	Project Location	Status of Project
Eastvale Community Center	34,650 square foot community center on 4.08 acres	Corner of Schleisman Road and Harrison Avenue in Eastvale	Approved, under construction
Eastvale South Retail Center Phase II – 24 Hour Fitness	43,000 square foot 24 Hour Fitness and 11,340 square foot commercial-retail building on 7 acres	Bounded on the east by I-15, on the west by Hamner Avenue, on the north by Bellegrave Avenue, and to the south, approximately ¼ mile south of Limonite Avenue in Eastvale	Approved, not built
Gary Dou Residential Project	General Plan amendment, change of zone, and tentative tract map to subdivide the 13.1-acre project site into 53 lots for residential development	Southeast corner of Sumner Avenue and Citrus Street, in the central portion of Eastvale	Approved, not built
The Eastvale Commerce Center Specific Plan	The project proposes to amend the General Plan land use designation from High-Density Residential (HDR) with a Community Center Overlay to Light Industrial (LI), Heavy Industrial (HI), Commercial Office (CO) and Commercial/Retail (CR). Additionally, the project proposes to change the zoning from Specific Plan (SP) (Resort Specific Plan No. 335) to SP (Eastvale Commerce Center Specific Plan). If adopted, the ECC SP would establish the land uses, development standards and zoning for the project site (205 acres).	Bounded on the west by Hamner Avenue, on the south by Bellegrave Avenue, on the east by Interstate 15 (I-15), and on the north by Cantu-Galleano Ranch Road (formerly Galena Street) in Eastvale	Proposed
ACI Residential Project	A General Plan amendment, change of zone, and tentative tract map to subdivide the planned development area into 145 lots for single-family residential development.	The south side of Citrus Avenue between Cleveland and Sumner avenues, in southern Eastvale	Approved, not built
Cloverdale Marketplace Phase II	The project would subdivide the entire Cloverdale Marketplace site (approximately 14.23 acres) into 11 parcels in order to create the opportunity for the applicant to sell individual parcels to existing tenants. The parcels range in size from .62 acres to 5.46 acres.	Southwest corner of intersection of Limonite Avenue and Hamner Avenue in Eastvale	Approved, not built

Project Name	Project Description	Project Location	Status of Project
Tuscana Village Specific Plan	The project proposes the construction of a pedestrian-oriented urban village mixed use development. As envisioned, the Specific Plan would allow for development of up to 255,404 square feet of commercial uses, 693,327 square feet of business park uses, and up to 200 residential units.	Milliken Avenue and Riverside Drive in Ontario	Proposed
Ontario Walmart Supercenter	The demolition of existing on-site vacant structures/parking areas and the construction of an approximately 190,803-square-foot Walmart Supercenter.	Mountain Avenue and Fifth Street in Ontario	Approved
Guasti Plaza Specific Plan Amendment	The proposed Specific Plan Amendment would also create a Residential Overlay Zone on approximately 11.72 acres at the eastern and southeastern section of the Specific Plan area, where a maximum of 500 dwelling units would be allowed in portions of Planning Areas 2 and 3, with a density of 25-65 units per acre.	Turner Avenue and New Guasti Road Ontario	Approved
SRG Chino South Industrial Park	The project proposes a General Plan Amendment and Zone Change to construct four concrete tilt-up industrial buildings ranging in size from 99,164 square foot to 789,052 square foot totaling 2,176,758 square feet. An existing building, approximately 99,164 square feet, will be utilized for general light industrial uses.	Pine Avenue and Euclid Avenue in Chino	Proposed

Sources: City of Eastvale Planning Department, 2011

ENVIRONMENTAL EFFECTS FOUND TO BE NOT SIGNIFICANT

The environmental topics related to the following were determined to have no impacts or less than significant impacts under the Initial Study (**Appendix 1.0-1**) and are therefore not discussed further in the Draft EIR:

- Aesthetics
- Biological Resources
- Cultural Resources
- Hazards and Human Health
- Geology/Soils
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing

Furthermore, the Initial Study found that the proposed General Plan would result in either no impact or a less than significant impact to the following specific environmental topics:

- **Agricultural Resources:**
  - 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)).
  - Result in the loss of forest land or conversion of forest land to non-forest use.
- **Hydrology/Water Quality:**
  - Violate any water quality standards or waste discharge requirements.
  - 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.
  - Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or 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.
  - Otherwise substantially degrade water quality.
  - Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map.
  - Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
  - 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.
  - Inundation by seiche, tsunami, or mudflow.
- **Public Services:**
  - Would the project result in substantial adverse physical impacts associated with the provision of or the 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 schools?

- **Utilities/Service Systems:**

  - Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

  - 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.

  - Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

  - Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

  - Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

  - Comply with federal, state, and local statutes and regulations related to solid waste.

  - As a result of the finding of no impact, less than significant impact, and since no comments were received on these issues from the public or public agencies during the NOP period, the above issues will not be discussed further in the EIR.

COMMON TERMINOLOGY USED IN THE DRAFT EIR

This Draft EIR uses the following terminology to describe the environmental effects of the proposed General Plan:

Less Than Significant Impact: A less than significant impact would cause no substantial change in the physical condition of the environment (no mitigation would be required for project effects found to be less than significant).

Significant Impact and Potentially Significant Impact: A significant impact would cause (or would potentially cause) a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects using specified standards of significance provided in each technical section of the Draft EIR. Identified significant impacts are those where the project would result in an impact that can be measured or quantified, while identified potentially significant impacts are those where an exact measurement of the project's effects cannot be made but substantial evidence indicates that the impact would exceed standards of significance. A potentially significant impact may also be an impact that may or may not occur and where a definite determination cannot be foreseen. Mitigation measures and/or project alternatives are identified to avoid or reduce project effects to the environment to a less than significant level.

Significant and Unavoidable Impact: A significant and unavoidable impact would result in a substantial negative change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.

Less Than Cumulatively Considerable Impact: A less than cumulatively considerable impact would cause no substantial change in the physical condition of the environment under cumulative conditions.

Cumulatively Considerable Impact: A cumulatively considerable impact would result when the incremental effects of an individual project result in a significant adverse physical impact on the environment under cumulative conditions.

Proposed General Plan: The proposed General Plan is the proposed project and includes the policy document consisting of 11 chapters (elements) and the Land Use Map.

Standards of Significance: A set of significance criteria to determine at what level or "threshold" an impact would be considered significant. Significance criteria used in this EIR include the CEQA Guidelines; factual or scientific information; regulatory performance standards of local, state, and federal agencies; and City goals and policies. Specified significance criteria used by the City of Eastvale are identified at the beginning of the impact analyses in each technical section of the Draft EIR.

Subsequent Projects/Activities: These are anticipated development projects (e.g., residential, commercial, industrial, or recreational projects) that could occur in the future as a result of the implementation of the proposed General Plan.

ENVIRONMENTAL IMPACT REPORTS USED IN THIS EIR

This Draft EIR utilizes technical information and analyses from the previously prepared and certified County of Riverside General Plan EIR, which is supported by the State CEQA Guidelines (see Sections 15148 [Citation] and 15150 [Incorporation by Reference]).

REFERENCES

Riverside County. 2003a. 2003. *County of Riverside General Plan Eastvale Area Plan*.

———. 2003b. 2003. *Riverside County General Plan*.

3.1 Land Use and Agricultural Resources

This section of the Draft EIR addresses agricultural land use and any significant environmental impacts of the proposed General Plan on these lands. Key issues addressed in this section include conflicts/incompatibilities between urban land uses and agricultural operations and loss of agricultural land.

3.1.1 EXISTING SETTING

EXISTING LAND USE AND AGRICULTURAL OPERATIONS

Agriculture has long been a major foundation of the economy and culture of Riverside County and has long existed in Eastvale. Although in recent years urban development has diminished agriculture's role in the western portion of the county and Eastvale, prior to the last decade, agriculture was the primary land use in the Eastvale area. Agricultural uses included dairies, crop farms, and wineries. Dairy operations in the area began approximately 40 years ago. At its peak, the larger Chino Basin, of which Eastvale is part, contained the highest concentration of dairy animals found anywhere in the world. There were approximately 354 dairies operating in the Chino Basin in 1989. Today, only a handful of dairies remain in Eastvale, the others having been converted into nonagricultural development.

Soils

According to the *Soil Survey, Western Riverside Area, California* (USDA 1971), published by the U.S. Department of Agriculture (USDA) and U.S. Department of Interior, the City of Eastvale has two general types of soil families: the Hanford-Tujunga-Greenfield association which dominates the soil profile of Eastvale and the San Emigdio-Grangeville-Metz association found adjacent to the Santa Ana River in Eastvale.

The soils of the Hanford-Tujunga-Greenfield association are generally defined as very deep, well drained to excessively drained, nearly level to moderately steep soils with a surface layer of sand to sandy loam, on alluvial fans and flood plains. Minor soils of this association are Arlington, Buren, Gorgonio, Grangeville, Hilmar, Honcut, Pachappa, Ramona, and Visalia, and are used for dry-farmed grain and pasture (USDA 1971).

The soils of the San Emigdio-Grangeville-Metz association are generally defined as very deep, poorly drained to somewhat excessively drained, nearly level to strongly sloping soils with a surface layer of calcareous loamy sand to loam, on alluvial fans and flood plains. Minor soils of this association are the Chino, Dello, and Domino, which are in basins where drainage is poor (USDA 1971). Other minor soils consist of Hanford, Pachappa, and Soboba soils (USDA 1971).

Williamson Act Contract Lands

Riverside County participates in the Williamson Act program. As of 2009, there were 59,307 acres of land in Riverside County under Williamson Act contracts (DOC, 2010). The Williamson Act creates an arrangement between the private landowner and the county to preserve agricultural lands. Terms are established under 10 year contracts. The Williamson Act is a voluntary program that helps reduce property tax rates for private lands enrolled in the program. The contract is renewed automatically unless the owner files a notice of non-renewal. In this manner, each Williamson Act contract (at any given date) is always operable at least nine years into the future. Contracts may be exited at the option of the landowner by initiating the process of term non-renewal. Under this process, the remaining contract term (nine years in the case of an original term of ten years) is allowed to lapse, with the contract null and void at the end of

the term. Property tax rates gradually increase during the non-renewal period, until they reach normal (i.e., non-restricted) levels upon termination of the contract.

The recent severe economic downturn has had disastrous consequences to State and local budgets. As a result, subvention payments have been greatly reduced and many of the local governments that participate in the Williamson Act have had to greatly reduce their planning staff (which traditionally has administered the Act). Because of these recent events, Riverside County did not report enrollment figures for fiscal year 2009-10 (DOC, 2010). There are eight different Williamson Act contracts (agricultural preserves) in Eastvale (County TLMA, 2011).

3.1.2 REGULATORY FRAMEWORK

FEDERAL

Farmland Protection Policy Act

The Natural Resources Conservation Service (NRCS), a federal agency within the U.S. Department of Agriculture, is the agency primarily responsible for implementation of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize federal programs' contribution to the conversion of farmland to nonagricultural uses by ensuring that federal programs are administered in a manner that is compatible with state, local, and private programs designed to protect farmland. NRCS provides technical assistance to federal agencies, state and local governments, tribes, or nonprofit organizations that desire to develop farmland protection programs and policies.

NRCS summarizes FPPA implementation in an annual report to Congress. The FPPA also established the Farmland Protection Program and the Land Evaluation and Site Assessment (LESA), which are discussed below.

Farmland Protection Program

The NRCS administers the Farmland Protection Program, a voluntary program aimed at keeping productive farmland in agricultural uses. Under the Farmland Protection Program, NRCS provides matching funds to state, local, or tribal government entities and nonprofit organizations with existing farmland protection programs to purchase conservation easements. The goal of the program is to protect between 170,000 and 340,000 acres of farmland per year (USDA-NRCS 2010). Participating landowners agree not to convert the land to nonagricultural use and retain all rights to use the property for agriculture. A minimum of 30 years is required for conservation easements and priority is given to applications with perpetual easements. NRCS provides up to 50 percent of the fair market value of the easement being conserved (USDA-NRCS 2010).

To qualify for a conservation easement, farmland must meet several criteria. The land must be:

- Prime, Unique, or other productive soil, as defined by NRCS based on factors such as water moisture regimes, available water capacity, developed irrigation water supply, soil temperature range, acid-alkali balance, water table, soil sodium content, potential for flooding, erodibility, permeability rate, rock fragment content, and soil rooting depth;
- Included in a pending offer to be managed by a nonprofit organization, state, tribal, or local farmland protection program;
- Privately owned;

- Placed under a conservation plan;
- Large enough to sustain agricultural production;
- Accessible to markets for the crop that the land produces; and
- Surrounded by parcels of land that can support long-term agricultural production.

STATE

California Department of Conservation

The Department of Conservation administers and supports a number of programs, including the Williamson Act, the California Farmland Conservancy Program, the Williamson Act Easement Exchange Program, and the Farmland Mapping and Monitoring Program. These programs are designed to preserve agricultural land and provide data on conversion of agricultural land to urban use. The Department of Conservation is responsible for approving Williamson Act Easement Exchange Program agreements.

California Land Evaluation and Site Assessment Model

The California LESA model was developed in 1997 based on the federal LESA system. It can be used to rank the relative importance of farmland and the potential significance of its conversion on a site-by-site basis. The California LESA model considers the following factors: land capability, Storie Index, water availability (drought and non-drought conditions), land uses within one-quarter mile, and "protected resource lands" (e.g., Williamson Act lands) surrounding the property. A score can be derived and used to determine if the conversion of a property would be significant under the California Environmental Quality Act (CEQA).

LOCAL

City of Eastvale Right to Farm Ordinance

The City of Eastvale recognizes agriculture as an important economic activity in the region and accommodates those agricultural and dairy owners who wish to continue their operations in the future through implementation of the Riverside County Right to Farm Ordinance. Right to Farm Ordinances have been adopted by several California counties to protect farmers in established farming areas from legal action that new residents in nearby urban settings may take against nuisances associated with normal, day-to-day farming activities, such as odor, noise, and dust. When the City of Eastvale incorporated, it adopted the Riverside County Right to Farm Ordinance (Ordinance 625.1). The ordinance states that agricultural activity, operating for more than three years, shall not be considered a "nuisance to the public" under changed conditions in or around the locality.

Western Riverside County Multiple Species Habitat Conservation Plan

Future development projects in Eastvale would be subject to the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) which is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats (including riparian/riverine habitat, vernal pools, and wetlands) in western

Riverside County. Compliance with the requirements of the MSHCP ensures that any adverse effects to protected species and associated habitats are minimized and mitigated.

The MSHCP is a criteria-based plan and identification of planning units (Area Plans) on which to base the criteria is necessary. The Area Plan framework for the criteria-based approach was selected to structure implementation strategies around established planning boundaries, such as Eastvale. For each Area Plan within the MSHCP Plan Area, such as the MSHCP-Eastvale Area Plan, a primarily map-based methodology was applied that relies on existing data compiled for species and vegetation communities as well as conservation biology principles. Information obtained during the habitat assessment workshops, additional communications with wildlife agencies and local biologists regarding biological issues and conservation priorities, and specific project information obtained from various sources were also used in the MSHCP-Eastvale Area Plan criteria development process (Riverside County, 2004). The first steps in preparation of the MSHCP-Eastvale Area Plan criteria involved identification of: (1) Planning Species; (2) Biological Issues and Considerations; and (3) reserve configuration and management issues (Riverside County, 2004). Within the MSHCP-Eastvale Area Plan, several wildlife and plant species known to occur within the Area Plan were selected as Planning Species to provide guidance for Conceptual Reserve Design. Listed species and species with specific habitat requirements were generally selected as Planning Species. Biological Issues and Considerations, such as maintenance of key habitat blocks or Linkages, were also identified for the MSHCP-Eastvale Area Plan.

The target conservation acreage for the MSHCP-Eastvale Area Plan (see **Figure 3.1.1**) is 1,040 - 1,185 acres; it is composed of approximately 895 acres of existing Public/Quasi-Public Lands and 145 - 290 acres of Additional Reserve Lands (Riverside County, 2004). The MSHCP-Eastvale Area Plan contains one Subunit, which encompasses a portion of the Santa Ana River, and target conservation acreages for this Subunit are established, as are a description of the Planning Species, Biological Issues and Considerations, and Criteria for this Subunit (Riverside County, 2004). There are seven Cells within this Subunit included reference purposes (Cells: 698, 786, 788, 875, 876, 964 and 965). "Planning species" identified for the MSHCP-Eastvale Area Plan include:

- arroyo chub
- Santa Ana sucker
- Cooper's hawk
- double-crested cormorant
- ferruginous hawk
- least Bell's vireo
- loggerhead shrike
- osprey
- peregrine falcon
- southwestern willow flycatcher
- tree swallow
- western yellow-billed cuckoo
- white-faced ibis
- white-tailed kite
- yellow-breasted chat
- yellow warbler
- bobcat
- western pond turtle
- Santa Ana River woollystar

Biological Issues and Considerations include the following:

- Provide for and maintain a continuous Linkage along the Santa Ana River from the eastern boundary of the Area Plan to Prado Basin and to Chino Hills to the west.
- Conserve riparian scrub/woodlands/forests in the Eastvale Area Plan portion of the Santa Ana River for the benefit of southwestern willow flycatcher, least Bell's vireo, and other riparian species.
- Conservation of alluvial fan sage scrub associated with the Santa Ana River to support Santa Ana River woollystar.
- Conserve foraging and breeding Habitats occurring in grasslands adjacent to the Santa Ana River to support sensitive bird species such as loggerhead shrike and white-faced ibis.
- Conserve existing wetlands and wetlands functions and values in the Eastvale Area Plan portion of the Santa Ana River, focusing on existing Habitats in the river.
- Maintain Core and Linkage Habitat for bobcat.
- Maintain Core Area for western pond turtle.

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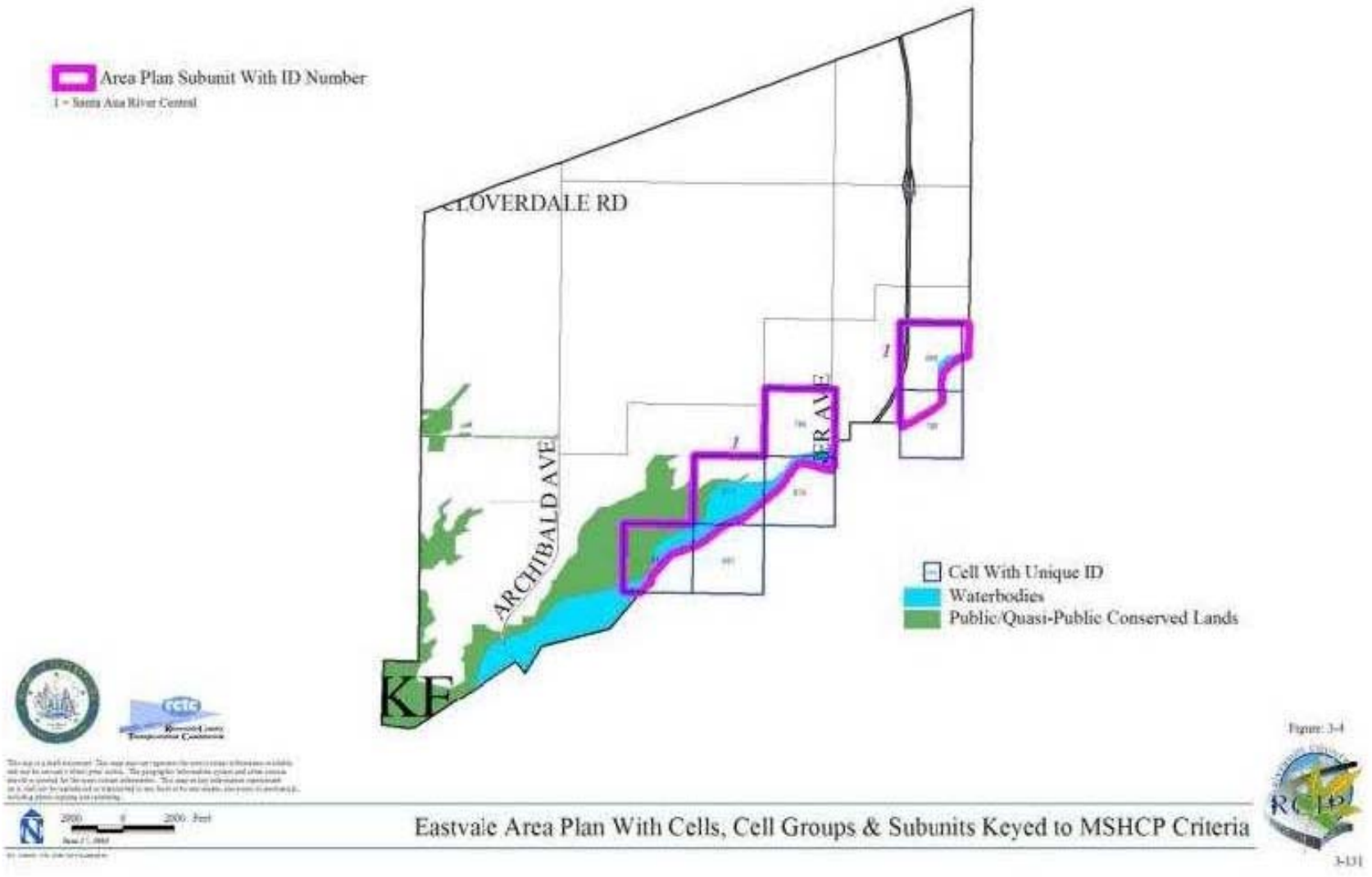
FIGURE 3.1.1 MSHCP - EASTVALE AREA



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3.1.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The Draft EIR impact analysis is based on the *changes* between the currently adopted Riverside County General Plan and the proposed new General Plan (see Section 3.0, Introduction to the Environmental Analysis).

The proposed City of Eastvale General Plan does not change the existing Land Use Map. Therefore, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur as a result of the proposed General Plan. The Initial Study concluded that the proposed General Plan would have no land use and planning impacts regarding the division of an established community within Eastvale or the conflict with any applicable land use plans. These issues will not be addressed further in this EIR.

The Initial Study determined that the City of Eastvale is located in an urban setting with little to no forested land which could be classified as timberland, and that no land within the City limits is zoned NA (Natural Assets) which includes timberland and timber production uses. Therefore, adoption and implementation of the proposed General Plan will not result in the conversion of any forestland or conflict with land zoned as forestland or timberland.

As the proposed land uses are the same as those adopted in the 2003 Riverside County General Plan, there would be no conversion of agricultural resources beyond that previously addressed in the Riverside County General Plan EIR. However, there is the potential for a land use impact of development on agricultural lands adjacent to Eastvale.

Based on Appendix G of the CEQA Guidelines, agricultural land use impacts are considered to be significant if the following could result from the implementation of the proposed General Plan:

1) Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use.

2) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

3) Changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to nonagricultural use.

4) 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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

METHODOLOGY

- The agricultural analysis is based on information gathered from the Riverside County General Plan, field visits, and the proposed Eastvale General Plan. This analysis addresses direct impacts and losses of farmland as well as indirect impacts on agricultural uses (e.g., growth pressure to convert farmlands, conflicts between agricultural operations

and urban land uses) as a result of the development of land use designations proposed under the General Plan as well as any roadway improvements and implementation of policy provisions.

The following proposed General Plan policies address impacts to agricultural land use compatibility:

Policy AQ-39: *The loss of agricultural productivity on lands designated for urban uses within the city limits is anticipated as a consequence of the development of Eastvale.*

Policy AQ-40: *As long as agricultural land in the City exists, the City shall not require buffers between farmland and urban uses, relying instead on the following actions to address the impacts of farming on urban uses:*

- *Implement the City's "Right to Farm" ordinance.*
- *Prospective buyers of property adjacent to agricultural land shall be notified through the title report that they could be subject to inconvenience or discomfort resulting from accepted farming activities as per provisions of the City's right-to-farm ordinance.*

The impact analysis provided below utilizes these proposed policies to determine whether implementation of the proposed General Plan would result in significant agricultural land use impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

Loss of and Conversion of Agricultural Land, including Lands under Williamson Act Contracts, through Agricultural/Urban Interface Conflicts (Standards of Significance 1, 2, & 3)

Impact 3.1.1 Implementation of the proposed General Plan would result in the conversion of agricultural land uses to nonagricultural use. However, such conversion would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR. Since the proposed City of Eastvale General Plan does not change the existing Riverside County Land Use Map, this is considered a **significant and unavoidable** impact.

The Riverside County General Plan EIR determined that the conversion of agricultural land uses as a result of implementation of the Riverside County General Plan would be a significant and unavoidable impact for which the County adopted a Finding of Overriding Consideration. While the proposed City of Eastvale General Plan does not change the existing Land Use Map, implementation of the General Plan would result in the conversion of agricultural land to urban uses.

Potential conflicts between new development and existing agricultural land uses would still occur when the new development, by its nature, precludes or interferes with the continued agricultural use of adjacent or nearby land. According to the Riverside County General Plan EIR, urban encroachment adversely affects the efficiency of remaining farming operations due to increased air pollution, livestock predation by pets, crop diseases resulting from inadequate care of off-farm ornamental plants, restrictions of pesticide use and burning, and requirements to set aside on-farm buffer zones. In addition, production costs increase due to rising land values,

water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and trespassing.

Since the 1990s Eastvale and the surrounding areas have grown more urbanized. Only seven dairy operations remain in Eastvale, which is a significant decrease from the large number that operated between 1950 and 1990. While the proposed General Plan Policy AQ-39 states that the loss of agricultural productivity on lands designated for urban uses within the city limits is accepted as a consequence of the development of Eastvale, the City recognizes the importance of agricultural lands and is committed to protecting this resource so long as existing agricultural uses wish to remain in place as supported by Policy AQ-40. Policy AQ-40 supports the City's Right to Farm ordinance and notifies prospective buyers of property adjacent to agricultural land uses, including agricultural lands under Williamson Act contracts, that they could be subject to inconvenience or discomfort resulting from accepted farming activities. This provision of disclosure would partially mitigate the potential for future development to impact adjacent agricultural lands. However, it is likely that over time most or all of the dairies in Eastvale will be converted to urban uses.

Like Eastvale, the City of Ontario, which borders Eastvale to the north, has planned to accommodate anticipated urban growth and is not seeking to maintain any agriculture land within its boundaries. The City of Chino, which borders Eastvale to the west, requires that new development adjacent to properties designated for agricultural uses have buffer zones, such as roads, setbacks and other physical boundaries, between agricultural uses and urban development. Buffers may be located on the land where the use is being changed, on the property containing the agricultural use, or a combination of the land use being changed and the agricultural property (City of Chino 2009). The City of Eastvale is separated from Chino by Hellman Avenue, a four-lane arterial roadway which provides at least 120 feet of distance between the communities. While it is unlikely that additional buffer would be required, the City of Eastvale works with all its surrounding jurisdictions in an effort to deal with cross-border and regional issues (see page 1-6 of the proposed General Plan). The City of Norco, to the south of Eastvale, does not contain any agricultural designated lands which border Eastvale and therefore no interface conflicts would occur. Similarly, the City of Jurupa Valley to the east is separated from Eastvale by the Interstate 15 transportation corridor, and therefore also does not contain the potential for agriculture/urban interface conflicts.

For the reasons stated above, impacts to agricultural land uses as a result of the proposed General Plan would be **significant and unavoidable**.

Consistency with Relevant Land Use Planning Documents (Standard of Significance 4)

Impact 3.1.2 Implementation of the proposed project (General Plan Update and Zoning Code Update) would not result in conflicts with relevant land use planning documents within and adjacent to the City of Eastvale. This is considered a **less than significant** impact.

The City of Ontario borders Eastvale to the west and north and the City of Chino borders Eastvale to the west. The areas of Eastvale that are directly adjacent to Ontario are adjacent to existing industrial development and State Route 60. Eastvale is separated from Chino by Hellman Avenue, a four-lane arterial roadway which provides at least 120 feet of distance between the communities. The City of Norco is located to the south of Eastvale and these two communities are separated by the Santa Ana River. The City of Jurupa Valley is to the east and is separated from Eastvale by the Interstate 15 transportation corridor.

Not only is the City of Eastvale separated from the surrounding cities by major transportation facilities and the Santa Ana River, the City is committed to working with all its surrounding jurisdictions in an effort to deal with cross-border and regional issues (see page 1-6 of the proposed General Plan). Therefore, the proposed General Plan and Zoning Code updates would not result in conflicts with the land use planning documents of adjacent jurisdictions.

The Zoning Code zones property and prescribes development standards and processes within the city limits. State planning law requires the Zoning Code to be consistent with the General Plan. Each General Plan land use category must have one or more corresponding zoning districts, and the development standards and land use regulations contained in the Zoning Code must reflect the policy statements in the Land Use Element. As stated in Section 2.0, Project Description, the current code is the Riverside County Zoning Ordinance which was adopted upon incorporation. The proposed changes to the code are reflected in **Appendix 2.0-1**, and follow a similar approach to that of the General Plan Update. The proposed Zoning Code Update does not make significant changes to the Riverside County Zoning Ordinance, but does clarify the development review process. The proposed Zoning Code Update is consistent with the proposed General Plan land use designations and various General Plan policies.

This impact is less than significant.

3.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

Land use impacts are typically isolated to a jurisdiction, except where land uses may interact or conflict with adjacent jurisdictions. The cumulative setting for agricultural land use impacts takes into account existing land use conditions, as well as planned and proposed development anticipated in Eastvale under build-out conditions, including consideration of land uses under adjacent cities.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Land Use Impacts (Standards of Significance 1, 2, & 3)

Impact 3.1.3 Implementation of the proposed General Plan, along with regional and statewide growth, would result in a contribution to the conversion of agricultural land uses. This would be a **less than cumulatively considerable** impact.

The Riverside County General Plan EIR determined that the Riverside County General Plan would result in a significant and unavoidable cumulative impact to agriculture for which the County adopted a Finding of Overriding Consideration. Conversion of agricultural land within the City of Eastvale would contribute to the conversion of agricultural land consistent with impacts analyzed in the Riverside County General Plan EIR. However, the City does not have the land area to create agricultural land as suggested in the Riverside County General Plan, and other mitigation measures such as buffers and agricultural easements are impractical in an urban environment. Since implementation of the City of Eastvale General Plan will eventually result in the conversion of all existing agricultural land in the City to nonagricultural uses, and therefore contribute to the regional loss of agricultural land, this impact is **significant and unavoidable**.

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3.2 TRANSPORTATION AND TRAFFIC

This section describes the existing transportation conditions in the City of Eastvale and relies on the Riverside County Traffic Model. Model forecast for both Base Year (2007) and Future Year (2035) from the Riverside County Transportation Analysis Model (RivTAM) were used in the analysis. RivTAM is the county's travel demand model and accounts for ambient growth, approved future development, and roadway improvements throughout the County of Riverside.

3.2.1 EXISTING SETTING

REGIONAL ROADWAY SYSTEM

The City's transportation network connects to other parts of Riverside and San Bernardino County and extends well beyond the City's borders. Not only must the transportation system accommodate the traffic that is generated by homes and businesses here, it also must accommodate regional traffic that passes through Eastvale. Interstate 15 (I-15) comprises the backbone of Eastvale's regional transportation network and serves much of the population in Riverside County. For instance, I-15 provides access south to San Diego and its many tourist and recreational amenities. According to the Riverside County General Plan, truck traffic can comprise at least 15 percent of the daily traffic volume on the segment of I-15 traversing Eastvale (Riverside County, 2003).

The efficient movement of goods in and through the City is essential to continued economic success. Most of the City's roadways have been designed to accommodate truck traffic and can handle heavy trucks. As the community develops, there may be areas where trucks should not travel regularly, which would allow for narrower roadways and a reduced number and size of sound walls. Over time, the City may adopt primary truck routes on roadways designed and maintained specifically for heavier vehicles.

Only a small portion of the northern area of the City has a rail line; however, the area is largely industrial and additional spur-lines could be constructed if the need arises. In addition to providing rail service, railroad right-of-way is often used for other utilities such as oil and gas pipelines and fiber optic and power lines.

Chino Airport in San Bernardino County affects the western portion of the Eastvale planning area. Chino Airport is a general aviation airport, owned and operated by the County of San Bernardino. The Airport is situated within the incorporated limits of the City of Chino in the southwestern corner of San Bernardino County, and covers approximately 1,102 acres. The Airport includes three runways, and features full precision instrument approach capabilities. As of 2012 there are 641 aircraft based at the Airport: 64 percent single-engine; 27 percent twin-engine piston; six percent turboprop; and three percent helicopters (RCLUC 2008, p. 2). In 2006, Chino Airport had 167,629 airport operations, for an average of 453 operations per day (RCLUC 2008, p. 2).

LOCAL ROADWAY SYSTEM

Eastvale contains various roadway "designations" for the City of Eastvale. Roadway designations are based on the amount of vehicle traffic anticipated on each roadway segment. Wider roadways with more travel lanes accommodate higher traffic volumes while narrow roadways have less traffic. Eastvale's roadways generally consist of local roads, secondary and major collectors, arterials and urban arterials.

An arterial roadway typically has four to six travel lanes, a raised center median, dedicated turn lanes, and parking lanes on both sides. These roadways are typically used to provide access to

employment and retail centers, although they may traverse residential areas. Collector roads are typically one to three travel lanes, and while roads may have center medians and parking lanes, the design may vary depending on circumstances. Collector roadways are designed to lead traffic to arterial roadways. Local roadways are used to provide direct access to residential lots and less intense development. Local roads typically have only one travel lane in each direction, with parking and sidewalks. Most of the roadways in Eastvale are local roadways which direct traffic to collectors and arterials. **Table 3.2-1** shows street classification, right-of-way width and typical number of lanes for collectors and urban arterial roadways in Eastvale.

The capacity of a transportation system is referred to as the level of service (LOS) and is generally defined as a ratio of traffic volume to roadway capacity. While it is customary to refer to an LOS using an alphabetic reference A–F, the inevitable comparison to school grades is not accurate. From a purely transportation standpoint, a roadway with an LOS of D is a roadway used to its design capacity. The proposed General Plan maintains the Riverside County standard of LOS C for roadways, but allows flexibility in the standard to accommodate different transportation methods and existing development in some areas. **Table 3.2-1** also shows the amount of traffic associated with roadway types at different levels of service.

TABLE 3.2-1
ROADWAY CLASSIFICATIONS AND MAXIMUM AVERAGE DAILY TRAFFIC VOLUMES AT LEVELS OF SERVICE C THROUGH E[1]

Roadway Classification	Number of Lanes	Minimum Right-of-Way Width Required	Maximum Two-Way Traffic Volume (ADT)[2]		
			Service Level C	Service Level D	Service Level E
Local Road	2	56 feet	Varies	Varies	Varies
Secondary Collector	2	74-100 feet	10,400	11,700	13,000
Major Collector	2	10-118 feet	14,400	16,200	18,000
Arterial	4	128-152 feet	28,700	32,300	35,900
Urban Arterial	6	128-152 feet	43,100	48,500	53,000
?	8	140-165 feet	57,400	64,600	71,800

Notes:
[1]All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.
[2]Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.

Arterials

The primary function of major arterials is to move large volumes of traffic between freeways and other arterials within Eastvale and to adjacent jurisdictions. As previously stated, an arterial roadway typically has four to six travel lanes, a raised center median, dedicated turn lanes, and parking lanes on both sides. These roadways are typically used to provide access to employment and retail centers, although they may traverse residential areas.

Collectors

Collectors are intended to "collect" traffic from local roadways and carry it to roadways higher in the street classification hierarchy. These roadways also serve adjacent properties and are

typically one to three travel lanes, and while roads may have center medians and parking lanes, the design may vary depending on circumstances.

Local Streets

Local streets are intended to serve adjacent properties and should enhance community livability. These roadways are used to provide direct access to residential lots and less intense development. Local roads typically have only one travel lane in each direction, with parking and sidewalks.

TRUCK ROUTES

The City has not yet adopted primary truck routes. While the efficient movement of goods in and through the City is essential to continued economic success, most of the City's roadways have been designed to accommodate truck traffic and can handle heavy trucks. As the community develops, it may be determined that trucks should not travel regularly in certain areas, at which point the creation and adoption of primary truck routes would commence.

PUBLIC TRANSPORTATION SYSTEM

The City of Eastvale does not operate a public transportation system. However, there are several County-operated systems that provide service to the City. As new roadways are constructed and existing roadways renovated, it will be important to ensure that the system is designed to accommodate future transit services.

The Riverside Transit Agency (RTA) operates fixed bus routes providing public transit service throughout a 2,500-square-mile area of western Riverside County. RTA's fixed routes have been designed to establish transportation connections between all cities and unincorporated communities in western Riverside County including Eastvale. RTA currently operates full-size buses, mini-buses, vans, and trolleys. The system carries approximately 6.4 million passengers annually, which equates to approximately 18,000 passengers per day. RTA also provides service to San Bernardino and Orange counties.

NON-MOTORIZED TRANSPORTATION

Pedestrian

Pedestrian facilities include sidewalks, walkways, bridges, crosswalks, signals, illumination, and benches, among other amenities. Pedestrian facilities provide a vital link between other modes of travel and can make up a considerable portion of short-range trips made in the community. Where pedestrian facilities exist, people will be much more likely to make shorter trips by walking rather than by vehicle. Pedestrian facilities also provide a vital link for commuters who use other transportation facilities such as rail, bus, and park-and-ride lots. For the most part, sidewalks are installed in most urban environments in the City when the roadway frontage is developed. Since development occurs in stages, there are numerous gaps in the sidewalk system in older developments and vacant lands. While these gaps may eventually be filled, the process will most likely take many years.

Bikeways

Eastvale does not have an independent system of bike paths but is included as part of the County's bikeway circulation system. While the Riverside County plan has a variety of bike path and trail designations, only bicycle paths (lanes painted adjacent to the existing roadways) currently exist within the City.

TRAFFIC ANALYSIS STUDY AREA

A detailed analysis was conducted of roadway facilities in the City. Eastvale includes roadway and transportation facilities in the City and considers facilities and regional traffic conditions outside of Eastvale. These roadway facilities were identified based on the availability of data with input from City staff.

EXISTING TRAFFIC VOLUMES

Fehr and Peers provided model forecasts for both Base Year (2007) and Future Year (2035) from the Riverside County Transportation Analysis Model (RivTAM) were used in the analysis. RivTAM is the county's travel demand model and accounts for ambient growth, approved future development, and roadway improvements throughout the County of Riverside.

EXISTING TRAFFIC CONDITIONS

The existing operation of Study Area roadways, freeways, transit system, and bicycle/pedestrian facilities are discussed below.

ROADWAY SEGMENTS

Analysis Methodology

Vehicle traffic operations conditions at roadway segments can be described in terms of LOS. LOS is a common qualitative measurement of the effects that various factors such as speed, travel time, traffic interruptions, freedom to maneuver and safety have on traffic operations from the perspective of the driver. Transportation facility LOS criteria range from A, representing the best conditions, to F representing overcapacity conditions. LOS D represents "at capacity" operations.

The proposed General Plan sets a standard of LOS C for roadways, but allows flexibility in the standard to accommodate different transportation methods and existing development in some areas. In keeping the existing land use designation and zone districts, the City is also ensuring that the Riverside County Regional Traffic model remains current for its assumptions about growth in the City of Eastvale. This Draft EIR uses LOS C standards for existing and future conditions which is identical to Riverside County, but recognizes that the County is in the process of reviewing whether LOS D is more appropriate. The proposed project also includes policy C-10 which supports LOS D near certain congested areas as well as C-11 which provides for other LOS in conjunction with Planned Development or transit-oriented design projects.

Existing Traffic Conditions

The study roadway segments were analyzed for average daily trips. **Table 3.2-2** presents the existing conditions analysis for roadway segments. Note that the figures in the table are based on the regional traffic model.

TABLE 3.2-2
ROADWAY LEVEL OF SERVICE – EXISTING CONDITIONS

Roadway Segment	Facility Type[1]	General Plan LOS Threshold	Existing Average Daily Trips (2007)	Existing LOS
Bellegrave Avenue				
Sumner Avenue to Hamner Avenue	2-Lane Major Collector	C	9,350	<C
Hamner Avenue to Interstate 15	2-Lane Major Collector	C	9,343	<C
Sumner Avenue				
Citrus Street to Schleisman Road	2-Lane Major Collector	C	3,222	<C
Schleisman Road to 65th Street	2-Lane Major Collector	C	1,943	<C
65th Street to Limonite Avenue	4-Lane Major Collector	C	4,407	<C
Limonite Avenue to Bellegrave Avenue	2-Lane Major Collector	C	3,415	<C
Chandler Street				
Archibald Street to Harrison Avenue	2-Lane Secondary Collector	C	2,747	<C
Harrison Avenue				
Chandler Street to Schleisman Road	4-Lane Secondary Collector	C	3,661	<C
Schleisman Road to 65th Street	4-Lane Secondary Collector	C	1,718	<C
65th Street to Limonite Avenue	4-Lane Secondary Collector	C	1,814	<C
65th Street				
Archibald Street to Harrison Avenue	2-Lane Secondary Collector	C	4,952	<C
Harrison to Sumner Avenue	2-Lane	C	5,420	<C

Roadway Segment	Facility Type[1]	General Plan LOS Threshold	Existing Average Daily Trips (2007)	Existing LOS
	Secondary Collector			
River Road				
Archibald Street to Hellman Avenue	2-Lane Secondary Collector	C	11,348	<C
Scholar Way				
Citrus Street to Schleisman Road	4-Lane Secondary Collector	C	3,394	<C
Schleisman Road to 65th Street	2-Lane Secondary Collector	C	1,467	<C
65th Street to Limonite Avenue	2-Lane Secondary Collector	C	1,181	<C
Limonite Avenue to Bellegrave Avenue	N/A			
Chandler Street				
Hellman Avenue to Archibald Avenue	4-Lane Arterial	C	2,521	<C
Cantu-Galleano Ranch Road Avenue				
S. Milliken Avenue to Interstate 15	4-Lane Arterial	C	12,001	<C
Limonite Avenue				
Hellman Avenue to Archibald Avenue	N/A			
Archibald Avenue to Harrison Avenue	2- Lane Arterial	C	7,196	<C
Harrison Avenue to Sumner Avenue	2- Lane Arterial	C	6,555	<C
Sumner Avenue to Scholar Way	2- Lane Arterial	C	8,761	<C
Scholar Way to Hamner Avenue	2- Lane Arterial	C	8,349	<C
Hamner Avenue to Interstate 15	4-Lane Arterial	C	23,009	<C
Schleisman Road				
Hellman Avenue to Archibald Avenue	2- Lane Arterial	C	10,539	<C
Archibald Avenue to Harrison Avenue	2- Lane Arterial	C	7,905	<C
Harrison Avenue to Sumner Avenue	4-Lane Arterial	C	7,319	<C
Sumner Avenue to Scholar Way	2- Lane Arterial	C	6,733	<C
Scholar Way to Hamner Avenue	2- Lane Arterial	C	7,681	<C
Hamner Avenue to Interstate 15	N/A			

Roadway Segment	Facility Type[1]	General Plan LOS Threshold	Existing Average Daily Trips (2007)	Existing LOS
Archibald Avenue				
Bluff Street to River Road	2- Lane Arterial	C	19,876	<C
River Road to Chandler Street	2- Lane Arterial	C	9,006	<C
Chandler Street to Schleisman Road	2- Lane Arterial	C	8,838	<C
Schleisman Road to 65th Street	2- Lane Arterial	C	10,215	<C
65th Street to Limonite Avenue	2- Lane Arterial	C	11,355	<C
Hamner Avenue				
River Road to Citrus Street	2- Lane Arterial	C	8,978	<C
Citrus Street to Schleisman Road	2- Lane Arterial	C	2,178	<C
Schleisman Road to 68th Street	4-Lane Arterial	C	8,664	<C
68th Street to 65th Street	6-Lane Arterial	C	7,525	<C
65th Street to Limonite Avenue	6-Lane Arterial	C	12,345	<C
Limonite Avenue to Bellegrave Avenue	2-Lane Arterial	C	11,136	<C
Bellegrave Avenue to Edison Avenue	2- Lane Arterial	C	9,794	<C
Edison Avenue to Cantu-Galleano Ranch Road	2- Lane Arterial	C	21,759	<C
Cantu-Gallenao Ranch Road to Chino Avenue	2- Lane Arterial	C	8,027	<C
Chino Avenue to E. Riverside Drive	2- Lane Arterial	C	6,656	<C
E. Riverside Drive to E. Mission Boulevard	2- Lane Arterial	C	6,957	<C

Source: Roadway segment counts were obtained from Fehr & Peers Transportation Consultants.[1]Facility Type categories per Western Riverside Council of Governments. The Riverside County Traffic Model uses year 2007 as base year. Therefore, the number of lanes identified for each roadway segment may be less than actual 2012 conditions.
Notes: N/A = Not Available as road segments do not yet exist.

3.2.2 REGULATORY FRAMEWORK

Transportation policies, laws, and regulations that would apply to the Circulation Element of the proposed General Plan are summarized below. This information provides a context for the impact discussion related to the proposed General Plan's consistency with applicable regulatory conditions.

STATE

State of California Transportation Improvement Program

The State Transportation Improvement Program (STIP) is a multiyear capital improvement program for transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund

estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, the California Department of Transportation (Caltrans) and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepares the Interregional Transportation Improvement Plan and regional agencies prepare the Regional Transportation Improvement Plans. Public hearings are held in January (even years) in both Northern and Southern California. The STIP is adopted by the CTC by April (even years).

Cities and other local agencies work through their regional transportation planning agencies to nominate projects for inclusion in the STIP. Once projects are programmed, agencies may begin the project implementation process.

REGIONAL

Southern California Association of Governments 2008 Regional Transportation Plan

The Regional Transportation Plan (RTP) is a multimodal, long-range planning document prepared by the Southern California Association of Governments (SCAG), in coordination with federal, state, and other regional, subregional, and local agencies in Southern California. The RTP includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight, and finances. The RTP is prepared every three years and reflects the future horizon based on a 20-year needs projection (the 2012 RTP was under development at the time of drafting this EIR). The RTP's primary use is as a regional long-range plan for federally funded transportation projects. It also serves as a comprehensive, coordinated transportation plan for all governmental jurisdictions within the region. Each agency responsible for transportation (such as local cities, the county, and Caltrans) has different transportation implementation responsibilities under the RTP. The RTP relies on the plans and policies governing circulation and transportation in each county to identify the region's future multimodal transportation system.

Riverside County Congestion Management Program

The Riverside Congestion Management Program (CMP) is updated every two years in accordance with the California Constitution Article 13b, Government Spending Limitation. The CMP was established in the state of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality.

3.2.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, agricultural land use impacts are considered to be significant if the following could result from the implementation of the proposed General Plan:

1) 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 nonmotorized 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.

2) Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

3) 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.

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

5) Result in inadequate emergency access.

6) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

ENVIRONMENTAL EFFECTS OF PROPOSED GENERAL PLAN CIRCULATION IMPROVEMENTS

While the roadway network of Eastvale is in excellent condition, the ability to move around without using an automobile can be improved. Many neighborhoods lack convenient pedestrian connection major roadways, which makes the use of transit more difficult. Even the simple task of walking to school, shopping, or work can be more difficult because of the lack of connectivity. As the City moves forward, the ability to retrofit trails and access into existing neighborhoods is anticipated to be examined. The City will also examine connectivity to trails and paths on a more regional basis, allowing for more comprehensive implementation of the Riverside County trail system.

Eastvale's existing transportation network consists mainly of wide roadways with large travel lanes designed to accommodate heavy trucks. As the City moves forward, maintaining such a large amount of pavement may place a strain on City finances. Requiring new development to build to such a standard may also place Eastvale at a competitive disadvantage in the region. Finally, the LOS standards currently only address the circulation needs of the automobile. A more complete standard would take into account land use patterns, pedestrian access, transit, and bicycle paths.

Subsequent site-specific environmental review of circulation improvements would be conducted once the improvements have been designed and exact improvements have been established, and would consider the following potential impacts:

- Temporary construction-related land use conflicts on adjacent uses associated with noise, construction traffic/access conflicts, and visual impacts.
- Conversion of agricultural land from roadway extension and widening.
- Temporary construction traffic impacts from construction vehicles and construction traffic control.
- Hazardous material exposure impacts from construction of facilities (roadways, trails, and transit).

- Air quality impacts from construction and operation of facilities (roadways, trails, and transit).
- Noise impacts from construction and operation of facilities (roadways, trails, and transit).
- Water quality (surface water and groundwater) and drainage impacts from construction and operation of facilities (roadways, trails, and transit).
- Conflicts with existing and planned alignments of infrastructure facilities (water supply, wastewater conveyance, electrical distribution, natural gas, telephone, and cable).
- Visual impacts with the construction of urban-type circulation improvements (e.g., four-lane and larger roadways, transit facilities, urban interchanges).

PROPOSED GENERAL PLAN DEVELOPMENT ASSUMPTIONS

As previously stated, the proposed General Plan retains the existing land use designations and roadway classifications in the current Riverside County General Plan. As a result, the build-out projections of the General Plan Planning Area under the proposed new General Plan Land Use Map are the same as projected under the existing Riverside County General Plan. Therefore, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed General Plan and build-out assumptions for Eastvale would be the same as the build-out assumptions for Eastvale in the 2003 Riverside County General Plan.

For the purposes of the analysis for traffic and circulation impacts, a quantitative transportation/traffic impact analysis was conducted for the growth that could occur by build-out. (As of 2012, it is estimated that approximately 80 to 90 percent of the City's residential areas have already been built. While this General Plan was prepared with a time horizon of at least 20 years, with even a modest rebound in the regional economy, build-out of Eastvale could easily occur with the next decade, and certainly within the General Plan's expected 20-year timeframe.)

TRANSPORTATION ANALYSIS METHODOLOGY AND RESULTS

In keeping the existing land use designation and zone districts, the City is also ensuring that the Riverside County Regional Traffic model remains current for its assumptions about growth in the City of Eastvale. This EIR assumes that the Traffic Allocation Zones used in the regional model are based on the Riverside County Land Use Map.

Traffic Operations Analysis Methodology

The transportation impact analysis is focused on potential LOS impacts that would occur from increased travel demand associated with projected build-out of the City of Eastvale.

Levels of Service

For this analysis, LOS was determined by comparing existing and forecast traffic volumes for selected roadway segments with average daily trips LOS capacity thresholds. A description of the LOS concept can be seen under the Local Roadway heading above.

The following proposed General Plan policies address transportation-related impacts:

Policy C-1: *Provide for new roadways in accordance with the Circulation Plan (Figure C-1 [of General Plan]).*

Policy C-2: *New roadways within the Circulation Plan (Figure C-1 [of General Plan]) shall be consistent with Table C-1 [of General Plan].*

Policy C-3: *The cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees.*

Policy C-4: *Align right-of-way dedications with existing dedications along adjacent parcels and maintain widths consistent with the ultimate design standard of the road, including required turning lanes and utilities.*

Policy C-9: *Private developers are responsible for the construction of new streets and providing access to highways for developing commercial, industrial, and residential areas.*

Policy C-10: *Maintain the following target levels of service: "C" along all City-maintained roads. A peak hour level of service of "D" may be allowed in commercial and employment areas, and at intersections of any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections.*

Policy C-12: *Limit access points, parking, turn lanes, and intersections of streets and highways based upon the road's classification and function. Access points must be located a sufficient distance away from major intersections to allow for safe, efficient operation.*

Policy C-13: *Construct and improve traffic signals at appropriate intersections. Traffic signals should be spaced and operated as part of coordinated systems to optimize traffic operation.*

Policy C-15: *Following the principles of complete streets, maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Ensure that the entire travel way is included in the design from building façade to building façade.*

Policy C-16: *Pedestrian access shall be provided from developments to existing and future transit routes, park and ride lots, terminal facilities, etc.*

Policy C-17: *All development located along planned trails shall provide access to the trails system. All developments shall allow for trails to pass their boundaries and shall provide connections to existing and proposed trails in Eastvale and adjacent jurisdictions.*

Action C-17.1: *Determine if trails, paths, and pedestrian access can be extended into existing neighborhoods to provide for connectivity to transit and pedestrian corridors.*

Action C-17.2: *Develop a multipurpose recreational trail network with support facilities which provide a linkage with regional facilities.*

Policy C-19: *Require, where feasible, the construction of overpasses or undercrossings where trails intersect urban arterials or freeways.*

Policy C-20: *Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted.*

Policy C-25: *Incorporate the potential for public transit service in the design of developments that are identified as major trip attractions (i.e., retail and employment centers).*

Policy C-26: *Design the physical layout of urban arterials, major and secondary highways, and collectors to facilitate bus operations, including turnouts and shelters.*

The impact analysis provided below utilizes these proposed policies and actions to determine whether implementation of the proposed General Plan would result in significant transportation impacts. The analyses identify and describe how specific policies and actions as well as other City regulations and standards provide enforceable requirements and/or performance standards that improve transportation and avoid or minimize significant impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

City Traffic Facilities (Standards of Significance 1 & 2)

Impact 3.2.1 Implementation of the proposed General Plan would result in unacceptable traffic operations on City roadway facilities. This would be a **significant and unavoidable** impact.

The peak-hour roadway traffic volumes shown in **Table 3.2-3** was compared to the roadway segment thresholds summarized in **Table 3.2-1** to analyze traffic operations on the Study Area roadway segments for the future Eastvale build-out analysis scenario.

TABLE 3.2-3
ROADWAY LEVEL OF SERVICE – PROPOSED GENERAL PLAN BUILD-OUT CONDITIONS

Roadway Segment	Future Facility Type[1]	General Plan LOS Threshold2	Projected Average Daily Trips (Build-Out)	Future LOS
Bellegrave Avenue				
Sumner Avenue to Hamner Avenue	4-Lane Arterial[3]	C	27,670	<C
Hamner Avenue to Interstate 15	4-Lane Arterial[3]	C	31,745	D

Roadway Segment	Future Facility Type[1]	General Plan LOS Threshold2	Projected Average Daily Trips (Build-Out)	Future LOS
Sumner Avenue				
Citrus Street to Schleisman Road	4-Lane Major Collector	C	11,735	<C
Schleisman Road to 65th Street	4-Lane Major Collector	C	7,079	<C
65th Street to Limonite Avenue	4-Lane Major Collector	C	9,683	<C
Limonite Avenue to Bellegrave Avenue	4-Lane Major Collector	C	10,263	<C
Chandler Street				
Archibald Street to Harrison Avenue	4-Lane Secondary Collector	C	5,443	<C
Harrison Avenue				
Chandler Street to Schleisman Road	4-Lane Secondary Collector	C	2,612	<C
Schleisman Road to 65th Street	4-Lane Secondary Collector	C	3,316	<C
65th Street to Limonite Avenue	4-Lane Secondary Collector	C	8,020	<C
65th Street				
Archibald Street to Harrison Avenue	4-Lane Secondary Collector	C	10,136	<C
Harrison to Sumner Avenue	4-Lane Secondary Collector	C	6,792	<C
River Road				
Archibald Street to Hellman Avenue	4-Lane Arterial[3]	C	21,504	<C
Scholar Way				
Citrus Street to Schleisman Road	4-Lane Secondary Collector	C	1,866	<C
Schleisman Road to 65th Street	4-Lane Secondary Collector	C	11,638	<C
65th Street to Limonite Avenue	4-Lane Secondary Collector	C	5,493	<C
Limonite Avenue to Bellegrave Avenue	4-Lane Secondary Collector	C	978	<C

Roadway Segment	Future Facility Type[1]	General Plan LOS Threshold2	Projected Average Daily Trips (Build-Out)	Future LOS
Chandler Street				
Hellman Avenue to Archibald Avenue	4-Lane Arterial	C	13,934	<C
Cantu-Galleano Ranch Road				
S. Milliken Avenue to Interstate 15	4-Lane Arterial	C	42,076	**F**
Limonite Avenue				
Hellman Avenue to Archibald Avenue	6-Lane Arterial	C	29,293	<C
Archibald Avenue to Harrison Avenue	6-Lane Arterial	C	42,392	<C
Harrison Avenue to Sumner Avenue	6-Lane Arterial	C	41,549	<C
Sumner Avenue to Scholar Way	6-Lane Arterial	C	38,826	<C
Scholar Way to Hamner Avenue	6-Lane Arterial	C	35,214	<C
Hamner Avenue to Interstate 15	6-Lane Arterial	C	57,562	**F**
Schleisman Road				
Hellman Avenue to Archibald Avenue	6-Lane Arterial	C	37,041	<C
Archibald Avenue to Harrison Avenue	6-Lane Arterial	C	47,196	D
Harrison Avenue to Sumner Avenue	6-Lane Arterial	C	47,915	D
Sumner Avenue to Scholar Way	6-Lane Arterial	C	48,440	D
Scholar Way to Hamner Avenue	6-Lane Arterial	C	48,681	D
Hamner Avenue to Interstate 15	6-Lane Arterial	C	56,315	**F**
Archibald Avenue				
Bluff Street to River Road	6-Lane Arterial	C	37,195	<C
River Road to Chandler Street	6-Lane Arterial	C	24,704	<C
Chandler Street to Schleisman Road	6-Lane Arterial	C	31,443	<C
Schleisman Road to 65th Street	6-Lane Arterial	C	37,707	<C
65th Street to Limonite Avenue	6-Lane Arterial	C	44,222	D
Hamner Avenue				
River Road to Citrus Street	4-Lane Arterial	C	16,243	<C
Citrus Street to Schleisman Road	4-Lane Arterial	C	10,395	<C
Schleisman Road to 68th Street	6-Lane Arterial	C	14,372	<C
68th Street to 65th Street	6-Lane Arterial	C	7,478	<C
65th Street to Limonite Avenue	6-Lane Arterial	C	20,020	<C
Limonite Avenue to Bellegrave Avenue	6-Lane Arterial	C	31,357	<C
Bellegrave Avenue to Edison Avenue	6-Lane Arterial	C	28,034	<C
Edison Avenue to Cantu-Galleano Ranch Road	8-Lane Arterial	C	44,775	<C

Roadway Segment	Future Facility Type[1]	General Plan LOS Threshold2	Projected Average Daily Trips (Build-Out)	Future LOS
Cantu-Galleano Ranch Road to Chino Avenue	8-Lane Arterial	C	10,184	<C
Chino Avenue to E. Riverside Drive	8-Lane Arterial	C	18,883	<C
E. Riverside Drive to E. Mission Boulevard	6-Lane Arterial	C	24,567	<C

Source: Roadway segment counts were obtained from Fehr & Peers Transportation Consultants.
Notes:
[1]Facility Type categories per Western Riverside Council of Governments. [2] The proposed General Plan sets a standard of level of service C for roadways, but allows flexibility in the standard to accommodate different transportation methods and existing development in some areas.
[3]Volumes on these roadways may trigger reclassification to arterial status which affects the LOS threshold.

The analysis presented in **Table 3.2-3** represents the development potential of the proposed land use designations at the build-out of Eastvale. As shown, all of the City roadway facilities will operate acceptably, with the exception of three roadway segments:

- Cantu-Galleano Ranch Road from S. Milliken Avenue to Interstate 15.
- Limonite Avenue from Hamner Avenue to Interstate 15.
- Schleisman Road from Hamner Avenue to Interstate 15.

These projections represent a conservative assumption of development as proposed General Plan policy provisions seek to improve roadway connections, increase travel choice, reduce vehicle miles traveled, support economic development, accommodate efficient goods movement, and support other community goals. For instance, new streets would be designed to accommodate all modes of travel, including transit, bicycles, and vehicles (Policy C-15) as the General Plan aims to develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles. In addition, Policy C-3 provides the mechanism to mitigate cumulative and indirect traffic impacts of future development through the payment of impact mitigation fees, and Policy C-9 states that private developers are responsible for the construction of new streets and providing access to highways for developing commercial, industrial, and residential areas. Despite these policy provisions, all City roadway facilities will operate acceptably with the exception of the three roadway segments listed above, resulting in a **significant and unavoidable** impact.

Air Traffic Patterns (Standard of Significance 3)

Impact 3.2.2 Implementation of the proposed General Plan would not increase the severity of air traffic-related impacts or result in a new impact. This is considered to result in **no impact**.

The Chino Airport is a general aviation airport, owned and operated by the County of San Bernardino and situated within the incorporated limits of the City of Chino in the southwest corner of San Bernardino County, just west of Eastvale. The airport includes three runways, and features full precision instrument approach capabilities. There are 641 aircraft based at the airport: 64 percent single-engine; 27 percent twin-engine piston; 6 percent turboprop; and 3 percent helicopters (RCALUC 2008, p. 2). In 2006, Chino Airport had 167,629 airport operations, for an average of 453 operations per day (RCALUC 2008, p. 2).

The proposed General Plan would result in no component of growth or change that would impact air traffic patterns, levels of air traffic use, or a change in existing access to air traffic. The policies of the proposed General Plan are internally consistent and the City of Eastvale coordinates with all its surrounding jurisdictions, including San Bernardino County which owns the Chino Airport, in an effort to deal with cross-border and regional issues (see page 1-6 of the proposed General Plan). Demand for aviation facilities or services, which may increase slightly with population and employment growth in the City, is not expected to cause a change in air traffic patterns or traffic levels that would result in substantial safety risk.

The proposed General Plan retains the existing land use designations and roadway classifications in the current Riverside County General Plan and would not include changes to the existing County of Riverside Land Use Map. As a result no development beyond that previously projected under the 2003 Riverside County General Plan would occur with implementation of the proposed General Plan, and build-out projections of the General Plan Planning Area under the proposed new General Plan Land Use Map would be the same as projected under the existing Riverside County General Plan. According to the City of Chino General Plan EIR (this analysis assumes the 2010 Chino General Plan EIR considered growth projections estimated by Riverside County in 2003), it is anticipated that flight operations at the Chino Airport would grow from a projected 243,523 takeoffs and landings in 2015 to a projected 260,448 in 2025, and it is expected that the airport could accommodate these increases (City of Chino 2010, p. 4.13-59).

In addition, proposed General Plan Policy S-18 states that the City shall consider the compatibility criteria in the Airport Land Use Compatibility Plan for the Chino Airport and the Chino Airport Master Plan in the review of potential land uses or projects within the area affected by the airport. Projects would be approved only where consistency with the compatibility criteria in the Airport Land Use Compatibility Plan could be demonstrated. Furthermore, the Riverside County Airport Land Use Commission (RCALUC) is currently reviewing the proposed General Plan and will be providing recommendations (An initial review by the RCALUC staff shows the proposed General Plan to be generally in compliance with their requirements).

Policy S-19 would ensure that new development near the Chino Airport is designed to protect public safety from airport operations consistent with recommendations and requirements of the Airport Land Use Commission, the Federal Aviation Administration, and other responsible agencies. It is the City's intent to comply with all state laws related to airport land use planning.

Therefore, there would be no increased or decreased safety risk related to air traffic due to the build-out of Eastvale and **no impact** would result.

Roadway or Traffic Hazards (Standard of Significance 4)

Impact 3.2.3 Implementation of the proposed General Plan could result in greater potential for roadway or traffic hazards. This is considered a **less than significant** impact due to policy provisions of the proposed General Plan.

As previously mentioned, while the roadway network of Eastvale is in excellent condition, the ability to move around without using an automobile can be improved. Many neighborhoods lack connectivity to sidewalks or major roadways and as the City moves forward, the ability to access existing neighborhoods is anticipated to be examined. An enhanced roadway network that accommodates pedestrian access needs would also address potential traffic hazards. In addition, Policy C-12 proposes that vehicular access points must be located a sufficient distance

away from major intersections to allow for safe, efficient operation. Also, Policy C-15 requires visibility and access for pedestrians for safe and convenient movement of pedestrians.

Build-out of Eastvale under the proposed General Plan would increase the amount of vehicle traffic which will require improvement and expansion of the City's roadway system. However, new and upgraded roadways will be designed according to applicable federal, state, and local design appropriate standards, which would minimize traffic hazards. The proposed General Plan does not contain any provisions which would exacerbate a hazardous situation associated with roadway hazards. Thus, this impact is **less than significant**.

Emergency Access (Standard of Significance 5)

Impact 3.2.4 Implementation of the proposed General Plan would result in an increase in traffic volumes, which could increase the potential opportunities for safety conflicts as well as potential conflicts with emergency access. However, implementation of the proposed General Plan would not result in inadequate emergency access. Therefore, this impact is considered **less than significant.**

While the build-out of Eastvale under the proposed General Plan would increase the amount of vehicle traffic, new and upgraded roadways would be designed according to applicable federal, state, and local design appropriate standards, minimizing conflicts with emergency access. Furthermore, all development proposals in Eastvale are reviewed by the City engineering and planning staff to ensure that they meet all applicable standards including the minimum turnaround area for emergency vehicles. For these reasons this impact is considered **less than significant**.

Transit, Bicycle, and Pedestrian System (Standard of Significance 6)

Impact 3.2.5 Build-out under the proposed General Plan would result in an increase in demand for public transit services in Eastvale. However, implementation of proposed General Plan would not conflict with policies, plans, or programs supporting alternative transportation nor increase demand for transit facilities greater than planned capacity. This is considered a **less than significant** impact.

Implementation of the proposed General Plan would result in increased transit, bicycle, and pedestrian use in Eastvale. However, the proposed General Plan would allow for a mix of residential densities and commercial uses to promote options for movement other than the use of motor vehicles. The General Plan aims to develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles (Policy C-15 through Policy C-23, Action C-17.1 and Action C-17.2, Policy C-25, and Policy C-26).

Pedestrian facilities include sidewalks, walkways, bridges, crosswalks, signals, illumination, and benches, among other amenities. Pedestrian facilities provide a vital link between other modes of travel and can make up a considerable portion of short-range trips made in the community. For the most part, sidewalks are installed in urban environments in the City when the roadway frontage is developed. Since development occurs in stages, there are numerous gaps in the sidewalk system in older developments and vacant lands. Eastvale does not have an independent system of bike paths but is included as part of the County's bikeway circulation system. While the Riverside County plan has a variety of bike path and trail designations, only bicycle paths (lanes painted adjacent to the existing roadways) currently exist within the City. The proposed General Plan is consistent with proposed County facilities in the area. Furthermore,

Policy C-15 mandates the principles of complete streets, which ensures that future development in Eastvale consistently design and operate the entire roadway with all users in mind—including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. Policy C-15 also requires consideration of maximum visibility and access for pedestrians, and seeks opportunities for the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Policy C-16 requires pedestrian access is provided from new developments to existing and future transit routes, park and ride lots, terminal facilities. Policy C-17 states that all development located along planned trails needs to provide access to the trails system and, furthermore, all developments must allow for trails to pass their boundaries and need to provide connections to existing and proposed trails in Eastvale and adjacent jurisdictions. Policy C-19 requires, where feasible, the construction of overpasses or undercrossings where trails intersect urban arterials or freeways. Policy C-20 mandates the review of all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted.

The City of Eastvale does not operate a public transportation system. However, there are several County-operated systems that provide service to the city. As new roadways are constructed and existing roadways renovated, it will be important to ensure that the system is designed to accommodate future transit services. Policy C-25 requires the incorporation of public transit service potential in the design of developments that are identified as major trip attractions (i.e., retail and employment centers). In addition, Policy C-26 requires the design of urban arterials, major and secondary highways, and collectors to facilitate bus operations, including turnouts and shelters. Lastly, as previously stated, Policy C-16 requires pedestrian access is provided from new developments to existing and future transit routes.

The intent of the proposed General Plan is to accommodate anticipated growth through walkable, new complete neighborhoods and mixed-use development and to develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians. The implementation of the proposed General Plan policies described above would reduce potential impacts to the Eastvale transit, bicycle, and pedestrian system to a **less than significant** level and no mitigation is necessary.

3.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The setting for this cumulative analysis includes existing, proposed, planned, and approved projects in Eastvale. Development in the Eastvale region (further identified in Section 3.0) would change the intensity of land uses in the region and increase housing, employment, shopping, and recreational opportunities. This analysis also accounts for regional traffic volume conditions anticipated for the build-out of Eastvale.

The following cumulative analysis is focused on cumulative traffic impacts to local roadway where City generated traffic would contribute to future traffic volumes from Riverside County and other regional traffic. Impacts to transit service, bicycle/pedestrian facilities, roadway safety and emergency access addressed above are area-specific impacts to the City and are not expected to result to be adversely impacted by cumulative conditions.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Traffic Impacts on Local Roadways (Standards of Significance 1 & 2)

Impact 3.2.6 When considered with existing, proposed, planned, and approved development in the region, implementation of the proposed General Plan would contribute to cumulative traffic volumes in the region that result in significant impacts to level of service and operations. This is considered a **cumulatively considerable** impact.

The traffic impact analyses provided in Impact 3.2.1 are based on cumulative conditions (the build-out of Eastvale in the year 2035 that takes into account anticipated traffic volumes from development in the region). The build-out of Eastvale under the proposed General Plan would add substantial traffic volumes on local roadways that would result in significant traffic impacts within Eastvale as well as in adjoining jurisdictions. Improvements to regional transportation facilities associated with cumulative traffic conditions are intended to be addressed through implementation of regional programs, such as the SCAG Regional Transportation Plan.

Implementation of proposed General Plan policies would assist in reducing its cumulative contribution to regional traffic effects (see Impact 3.2.1 regarding specific policies that address traffic impacts). However, this impact would still be considered **cumulatively considerable** and **significant and unavoidable**.

REFERENCES

Chino, City of. 2010. *City of Chino General Plan Environmental Impact Report*.

Riverside County Airport Land Use Commission (RCALUC). 2008. *Chino Airport Land Use Compatibility Plan Initial Study / Mitigated Negative Declaration*.

Riverside County. 2003. *Riverside County General Plan*.

3.3 Air Quality

This section examines the air quality in the City of Eastvale, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the proposed General Plan.

3.3.1 EXISTING SETTING

SOUTH COAST AIR BASIN

South Coast Air Basin Characteristics

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The City of Eastvale lies in the South Coast Air Basin (SoCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Temperature and Precipitation

The air basin is part of a semi-permanent high pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993). The Western Regional Climate Center (WRCC) maintains monitoring stations and historical climate information for the western United States. The closest meteorological monitoring station to Eastvale is in the City of Corona (ID No. 042031) approximately four miles to the south. The average low is reported at 39.7°F in January, and the average high is 92.3°F in July. All areas in the SoCAB have recorded temperatures above 100°F in recent years (WRCC 2011).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.71 inches per year in Eastvale (WRCC, 2011).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent and low clouds, often referred to as high fog, and are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in the City of Eastvale (SCAQMD 1993).

AIR POLLUTANTS OF CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_X), sulfur dioxide (SO_2), most particulate matter (PM_{10} and $PM_{2.5}$), lead (Pb), and fugitive dust are primary air pollutants. Of these, CO, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants. Presented below is a description of each of the primary and secondary criteria air pollutants and their known health effects.

Other pollutants, such as carbon dioxide, a natural by-product of animal respiration that is also produced in the combustion process, have been linked to such phenomena as climate change. While there are no adopted thresholds for their release, Assembly Bill (AB) 32 requires the state to reduce emissions to 1990 levels by 2020, which is discussed further in Section 3.5, Greenhouse Gases and Climate Change. These pollutants do not jeopardize the attainment status of the SoCAB.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

Reactive Organic Gases (ROG) are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROG include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer

products such as aerosols. Adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form secondary pollutants such as ozone.

Nitrogen Oxides (NO_X) serve as integral participants in the process of photochemical smog production. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen. NO_X acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

Nitrogen Dioxide (NO_2) is a by-product of fuel combustion. The principal form of NO_2 produced by combustion is NO, but NO reacts with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children has also been observed at concentrations below 0.3 part per million (ppm). NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10} (particulates having an aerodynamic diameter of 10 microns—or 0.0004 inch—or less in diameter) and ozone.

Sulfur Dioxide (SO_2) belongs to the family of sulfur oxide gases (SO_x). SO_2 is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. Fuel combustion is the primary source of SO_2. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. A primary source of SO_2 emissions is high sulfur content coal. Gasoline and natural gas have very low sulfur content and hence do not release significant quantities of SO_2. SO_2 is a precursor to sulfate (SO_4), which is a component of particulate matter. In addition SO_2 and NO_2 can react with other substances in the air to form acids, which fall to the earth as rain, fog, snow or dry particles.

Particulate Matter (PM) is a mixture of pollutants in liquid and solid forms. Particulate matter may be classified as primary or secondary. Primary particulates are emitted directly by emission sources, whereas secondary particulates are formed through atmospheric reaction of gases. Particulates are usually classified according to size. The particle diameter can vary from approximately 0.005 micron to 100 microns. Particulate matter less than 10 microns in diameter is referred to as PM_{10} (coarse particulates) and less than 2.5 microns is referred to as $PM_{2.5}$ (fine particulates).

Studies have found a statistical association between adverse health effects and PM_{10}. The U.S. Environmental Protection Agency (USEPA) has estimated that airborne particles cause over 15,000 premature deaths in the United States per year. Recent studies using $PM_{2.5}$ data have shown an even stronger association between health effects and particles in this size range. Evidence that smaller particles are more harmful is further supported by advanced research (World Bank 2003). Size determines how and where different particles are deposited in the respiratory tract. Ultrafine particles behave similar to gases and travel to lower regions of the lungs, whereas larger particles are deposited in the upper or middle region of the respiratory tract. Particles larger than 10 microns in diameter are deposited almost exclusively in the nose and throat. Combustion processes contribute the majority of fine particulate matter whereas non-combustion processes contribute the majority of the larger PM fraction (Word Bank 2003). Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.

Ozone (O_3), or smog, is one of a number of substances called photochemical oxidants that are formed when ROG and NO_X (both by-products of the internal combustion engine) react with sunlight. O_3 is present in relatively high concentrations in the SoCAB, and the damaging effects of photochemical smog are generally related to the concentrations of O_3. O_3 poses a health threat, especially to those who already suffer from respiratory diseases. Additionally, O_3 has been tied to crop damage, typically in the form of stunted growth and premature death. O_3 can also act as a corrosive, resulting in property damage such as the degradation of rubber products.

AMBIENT AIR QUALITY

Ambient air quality in the City of Eastvale can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of Eastvale are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SoCAB that maintains air quality monitoring stations that process ambient air quality measurements.

The Mira Loma–10551 Bellegrave air quality monitoring station and Mira Loma–Van Buren air quality monitoring station are the closest stations to Eastvale at two and one-fifth miles and three miles to the east, respectively. These stations monitor ambient concentrations of ozone and PM_{10} and $PM_{2.5}$. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations within Eastvale.

Table 3.3-1 summarizes the published data since 2008 from the Mira Loma–10551 Bellegrave and Mira Loma–Van Buren air quality monitoring stations for each year that the monitoring data is provided.

TABLE 3.3-1
SUMMARY OF AMBIENT AIR QUALITY DATA

Pollutant Standards	2008	2009	2010
10551 Bellegrave Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.149	0.132	0.119
Max 8-hour concentration (ppm) (state/federal)	0.117/0.117	0.103/0.102	0.09/0.089
Number of days above state 1-hr standard	30	21	18
Number of days above state/federal 8-hour standard	56 / 42	43 / 29	51 / 34
Respirable Particulate Matter (PM_{10})			
Max 24-hour concentration (μg/m3) (state/federal)	-- / 97.6	-- / 84.6	-- / 64.6
Number of days above state/federal standard	-- / --	-- / --	-- / 0
Fine Particulate Matter ($PM_{2.5}$)			
Max 24-hour concentration (μg/m3) (state/federal)	-- / --	-- / --	-- / --
Number of days above state/federal standard	-- / --	-- / --	-- / --

Pollutant Standards	2008	2009	2010
Van Buren Monitoring Station			
Ozone			
Max 1-hour concentration (ppm)	0.135	0.118	0.121
Max 8-hour concentration (ppm) (state/federal)	0.188/0.107	0.09/0.09	0.094/0.094
Number of days above state 1-hr standard	38	13	22
Number of days above state/federal 8-hour standard	61 / 46	29 / 18	59 / 38
Respirable Particulate Matter (PM_{10})			
Max 24-hour concentration (µg/m3) (state/federal)	126 / 135	105 / 108	87 / 89
Number of days above state/federal standard	205.7 / 0	204.6 / 0	137.1 / 0
Fine Particulate Matter ($PM_{2.5}$)			
Max 24-hour concentration (µg/m3) (state/federal)	56.1 / 50.9	49.2 / 74	54.2 / 54.2
Number of days above state/federal standard	– / --	– / 19	– / 8

Source: CARB 2011a
Notes:
µg/m3 = micrograms per cubic meter; ppm – parts per million
– Insufficient or no data currently available to determine the value

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, one of the most important in Southern California being particulate matter from diesel-fueled engines. In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in the diesel exhaust were considered as TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

In 2008, SCAQMD updated the study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the air toxics risk (SCAQMD, 2008a).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

3.3.2 REGULATORY FRAMEWORK

Subsequent development allowed with implementation of the proposed General Plan has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, future development activities under the proposed General Plan falls under the ambient air quality standards promulgated on the local, state, and federal levels. The Federal Clean Air Act of 1971 and Clean Air Act Amendments (1977) established the National Ambient Air Quality Standards (NAAQS), which are promulgated by the USEPA. The state of California has also adopted its own California Ambient Air Quality Standards (CAAQS), which are promulgated by CARB. The proposed General Plan would occur in the SoCAB which is under the air quality regulatory jurisdiction of SCAQMD and is subject to the rules and regulations adopted by the SCAQMD to achieve attainment with the NAAQS and CAAQS. Federal, state, regional, and local laws, regulations, plans, and guidelines are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act of 1971 established NAAQS, with states retaining the option to adopt more stringent standards or to include other pollution species. These standards are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both the state of California and the federal government have established health-based AAQS for six air pollutants. As shown in **Table 3.3-2**, these pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM_{10}, $PM_{2.5}$, and lead. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

TABLE 3.3-2
AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]	National Standards[2,3]
Ozone	8 Hour	0.070 ppm (137μg/m^3)	0.075 ppm
	1 Hour	0.09 ppm (180 μg/m^3)	See Note 4
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide	1 Hour	0.18 ppm (339 μg/m^3)	0.100 ppb [11]
	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	0.053 ppb (100 μg/m^3)
Sulfur Dioxide	24 Hour	0.04 ppm (105 μg/m^3)	N/A
	3 Hour	--	N/A
	1 Hour	0.25 ppm (665 μg/m^3)	75 ppb
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 μg/m^3	N/A
	24 Hour	50 μg/m^3	150 μg/m^3
Particulate Matter - Fine ($PM_{2.5}$)	Annual Arithmetic Mean	12 μg/m^3	15 μg/m^3
	24 Hour	N/A	35 μg/m^3
Sulfates	24 Hour	25 μg/m^3	N/A
Lead	Calendar Quarter	N/A	1.5 μg/m^3
	30 Day Average	1.5 μg/m^3)	N/A
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m^3)	N/A
Vinyl Chloride (chloroethene)	24 Hour	0.01 ppm (26 μg/m^3)	N/A
Visibility-Reducing Particles	8 Hour (10:00 to 18:00 PST)	--	N/A

Source: CARB 2010

Notes: mg/m^3 = milligrams per cubic meter; ppm = parts per million; ppb = parts per billion; μg/m^3 = micrograms per cubic meter

[1] California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM10, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.

[2] National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the three-year average of the fourth highest daily concentrations is 0.075 ppm (75 ppb) or less. The 24-hour PM_{10} standard is attained when the three-year average of the 99th percentile of monitored concentrations is less than 150 μg/m^3. The 24-hour $PM_{2.5}$ standard is attained when the three-year average of 98th percentiles is less than 35 μg/m3.Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the three-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the three-year average of annual averages spatially averaged across officially designed clusters of sites falls below the standard.

[3] National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety.

[4] The national 1-hour ozone standard was revoked by USEPA on June 15, 2005.

AIR QUALITY MANAGEMENT PLAN

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the Air Quality Management Plan (AQMP) for the SoCAB. Since 1979, a number of AQMPs have been prepared.

The most recent adopted comprehensive plan is the 2007 AQMP, which was adopted on June 1, 2007. The 2007 AQMP builds upon the approaches for attainment in the 2003 AQMP and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. It proposes an attainment demonstration of the federal $PM_{2.5}$ standards through a more focused control of SO_X, directly emitted $PM_{2.5}$, and focused control of NO_X and reactive organic gases (ROG) by 2015. The 8-hour ozone control strategy builds upon the $PM_{2.5}$ strategy, augmented with additional NO_X and ROG reductions to meet the standard by 2024, assuming an extended attainment date is obtained (SCAQMD 2007).

The SCAQMD is currently developing the 2012 AQMP, which will be a regional and multiagency effort including SCAQMD, CARB, SCAG and the USEPA. State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans (SCAQMD 2011). The 2012 AQMP will incorporate the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts (SCAQMD 2011). However, since SCAQMD has not yet adopted the 2012 AQMP, analysis for the proposed plan has followed the 2007 AQMP guidelines.

The AQMP provides local guidance for the State Implementation Plan (SIP), which provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards. Areas that meet ambient air quality standards are classified as "attainment" areas, while areas that do not meet these standards are classified as "nonattainment" areas. Severity classifications for ozone nonattainment range in magnitude: marginal, moderate, serious, severe, and extreme. The attainment status for the SoCAB is included in **Table 3.3-3**.

TABLE 3.3-3
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Nonattainment	Unclassified/Attainment
SO_2	Attainment	Attainment
Lead	Nonattainment	Attainment

Source: CARB 2011b

As shown in **Table 3.3-3**, the SoCAB is designated as a nonattainment area for ozone, PM10, PM2.5, NO2, and lead for state standards and ozone, PM10, and PM2.5 for federal standards.

South Air Quality Management District Rules and Regulations

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is assuring that the federal and state ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

Toxic Air Contaminant Regulations

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal Clean Air Act (42 United States code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. The CARB has, to date, established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

Since the last update to the TAC list in December 1999, the CARB has designated 244 compounds as TACs (CARB 1999). Additionally, the CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

3.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below analyzes the *changes* between the currently adopted Riverside County General Plan and the proposed new General Plan (see Section 3.0, Introduction to the Environmental Analysis) and is based on the application of the following CEQA Guidelines Appendix G thresholds of significance:

1) Conflict with or obstruct implementation of an applicable air quality plan.

2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

4) Expose sensitive receptors to substantial pollutant concentrations.

5) Create objectionable odors affecting a substantial number of people.

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to SCAQMD, an air quality impact is considered significant if the proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. SCAQMD has established thresholds of significance for air quality for construction and operational activities of future, subsequent land use developments allowed under the proposed General Plan, as shown in **Table 3.3-4**.

TABLE 3.3-4
SCAQMD REGIONAL SIGNIFICANCE THRESHOLDS

Air Pollutant	Construction Activities	Operations
Reactive Organic Gases (ROG)	75 pounds/day	55 pounds/day
Carbon Monoxide (CO)	550 pounds/day	550 pounds/day
Nitrogen Oxides (NO_x)	100 pounds/day	55 pounds/day
Sulfur Oxides (SO_x)	150 pounds/day	150 pounds/day
Coarse Particulates (PM_{10})	150 pounds/day	150 pounds/day
Fine Particulates ($PM_{2.5}$)	55 pounds/day	55 pounds/day

Source: SCAQMD 1993. ($PM_{2.5}$ threshold adopted June 1, 2007).

CO Hotspot Analysis

In addition to the daily thresholds listed above, future development projects under the proposed General Plan would also be subject to the ambient air quality standards. These are addressed though an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million
- 8-hour = 9 parts per million

The significance of localized impacts depends on whether ambient CO levels in the vicinity of a future development project are above state and federal CO standards. CO concentrations in Eastvale no longer exceed the CAAQS or NAAQS criteria, and the SoCAB has been designated as attainment under the 1-hour and 8-hour standards.

Localized Significance Thresholds

In addition to the CO hot spot analysis, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent national or state AAQS. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects of five acres and less. The City of Eastvale is located within SCAQMD SRA 23. **Table 3.3-5** shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 23 with sensitive receptors located within 82 feet (25 meters) of the project site.

TABLE 3.3-5
LOCAL SIGNIFICANCE THRESHOLD (LTS) IMPACTS –POUNDS PER DAY

Project Size	Nitrogen Oxide	Carbon Monoxide	PM_{10}	$PM_{2.5}$
One Acre (construction / operations)	118 / 118	602 / 602	4 / 1	3 / 1
Two Acres (construction / operations)	170 / 170	883 / 883	7 / 2	4 / 1
Five Acres (construction / operations)	270 / 270	1,577 / 1,577	13 / 4	8 / 2

Source: SCAQMD, 1993

Toxic Air Contaminant Thresholds

The SCAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. The SCAQMD has adopted Rule 1401 for both new and modified sources that use materials classified as air toxics. The SCAQMD CEQA Guidelines for permit processing consider the following types of projects significant:

- Any project involving the emission of a carcinogenic or toxic air contaminant identified in SCAQMD Rule 1401 that exceeds the maximum individual cancer risk of one in one million or 10 in one million if the project is constructed with best available control strategy for toxics (T-BACT) using the procedures in SCAQMD Rule 1401;

- Any project that could accidentally release an acutely hazardous material or routinely release a toxic air contaminant posing an acute health hazard; and

- Any project that could emit an air contaminant not currently regulated by SCAQMD rule, but that is on the federal or state air toxics list.

METHODOLOGY

Air quality impacts were assessed in accordance with methodologies recommended by CARB and SCAQMD. Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operational from a variety of land use projects.

The following proposed General Plan policies address air quality-related impacts:

Policy LU-11: *Development should be located to capitalize on multimodal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile.*

Policy LU-12: *The Land Use Map should provide for land use patterns which reduce the number and length of motor vehicle trips.*

Policy LU-14: *Clustering can be applied in all residential designations. The allowable density of a particular land use designation may be clustered in one portion of the site in smaller lots, as long as the ratio of dwelling units per acre remains within the allowable density range associated with the designation.*

Policy LU-15: *The City will encourage parcel consolidation or coordinated planning of adjacent parcels, through incentive programs and planning assistance.*

Policy LU-16: *The City will allow mixed-use projects to develop in commercially designated areas in accordance with the guidelines of the Town Center land use designation and with special consideration of impacts to adjacent uses.*

Policy C-11: *Alternative levels of service may be allowed on intersections in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, and alternative transportation and comfortable walking distance to goods and services.*

Policy C-15: *Following the principles of complete streets, maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Ensure that the entire travel way is included in the design from building façade to building façade.*

Policy C-16: *Pedestrian access shall be provided from developments to existing and future transit routes, park and ride lots, terminal facilities, etc.*

Policy C-17: *All development located along planned trails shall provide access to the trails system. All developments shall allow for trails to pass their boundaries and shall provide connections to existing and proposed trails in Eastvale and adjacent jurisdictions.*

Policy C-18: *Collaborate with schools to ensure that school children have safe and adequate transportation routes available, such as a pedestrian or bike paths, or a local bus service.*

Policy C-19: *Require, where feasible, the construction of overpasses or undercrossings where trails intersect urban arterials or freeways.*

Policy C-20: *Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted.*

Policy C-21: *Coordinate with Caltrans, the Riverside County Transportation Commission, transit agencies, and other responsible agencies to identify the need for additional park-and-ride facilities along major commuter travel corridors and at major activity centers.*

Policy C-22: *Examine the use of public access utility easements for trail linkages to the regional trails system and/or other open space areas.*

Policy C-25: *Incorporate the potential for public transit service in the design of developments that are identified as major trip attractions (i.e., retail and employment centers).*

Policy C-26: *Design the physical layout of urban arterials, major and secondary highways, and collectors to facilitate bus operations, including turnouts and shelters.*

Policy AQ-4: *Attain performance goals and/or VMT reductions which are consistent with SCAG's Growth Management Plan.*

Policy AQ-5: *Sensitive receptors should be separated and protected from polluting point sources to the greatest extent possible.*

Policy AQ-6: *Require site plan designs to protect people and land uses sensitive to air pollution.*

Policy AQ-7: *The City encourages the use of pollution control measures such as landscaping, vegetation, and other materials, which trap particulate matter or control pollution.*

Policy AQ-8: *The City encourages the planting of urban trees to remove pollutants from the air, provide shade, and decrease the negative impacts of heat on the air.*

Policy AQ-16: *Require stationary pollution sources to minimize the release of toxic pollutants through:*

- *Design features;*
- *Operating procedures;*
- *Preventive maintenance;*
- *Operator training; and*
- *Emergency response planning*

Policy AQ-17: *To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, the Environmental Protection Agency and the California Air Resources Board.*

The impact analysis provided below utilizes these proposed policies to determine whether implementation of the proposed General Plan would result in significant impacts. The analyses identify and describe how specific policies as well as other regulations and standards provide enforceable requirements and/or performance standards that protect air quality and avoid or minimize significant impacts.

IMPACTS AND MITIGATION MEASURES

Conflict with the 2007 Air Quality Management Plan (Standard of Significance 1)

Impact 3.3.1 Subsequent land use activities associated with implementation of the proposed General Plan would not conflict with or obstruct implementation of the 2007 Air Quality Management Plan. The proposed General Plan also includes several policy provisions that would further assist in air quality attainment efforts. This impact is considered to be **less than significant**.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, Eastvale is located within the SoCAB, which is under the jurisdiction of SCAQMD. SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2007 Air Quality Management Plan (AQMP). The 2007 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by SCAG.

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, economy, community development, and environment. With regard to air quality planning,

SCAG has prepared the Integrated Growth Forecast and Regional Transportation Plan that form the basis for the land use and transportation control portions of the 2007 AQMP. These documents are used in the preparation of the air quality forecasts and consistency analysis included in the 2007 AQMP.

The Riverside County General Plan EIR determined that implementation of the Riverside County General Plan is consistent with SCAG's Regional Growth Management Plan and SCAQMD's 2007 AQMP, and the vehicle miles traveled growth rate under the Riverside County General Plan is consistent with SCAG's projected population growth. The proposed Eastvale General Plan will result in a new General Plan that blends existing (County of Riverside) goals and policies and new, Eastvale-specific goals and policies. As stated in Section 2.0, Project Description, the proposed General Plan retains the existing land use designations in the current Riverside County General Plan and, similarly, roadway classifications and other physical planning in the Riverside County General Plan will remain unchanged.

The proposed General Plan would not conflict with or obstruct implementation of the 2007 AQMP. The proposed City of Eastvale General Plan would not include changes to the existing County of Riverside Land Use Map and, as a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan. Therefore, while implementation of the proposed General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development which would contribute to the vehicle miles traveled growth rate, such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR.

In addition, implementation of the proposed policy provisions of the Eastvale General Plan would not obstruct implementation of any of the control measures contained within the 2007 AQMP. The proposed General Plan seeks to reduce the environmental impact (including air quality) of land use development by increasing the viability of walking, biking, and transit by allowing mixed-use projects which provide land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use. For example, Policy LU-14 would allow mixed-use projects to develop in commercially designated areas in accordance with the guidelines of the Community Center Land Use Designation, and Policy LU-29 states that commercial uses should be located near transportation facilities and include facilities to promote the use of public transit (such as bus turnouts, bus shelters, etc.). Also, Policy C-11 would allow an alternative level of service (a level of service below C) in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, alternative transportation and comfortable walking distance to goods and services in order to promote compact development; and Policy C-25 would require the incorporation of public transit service in the design of developments that are identified as major trip attractions (i.e., retail and employment centers).

The intent of the proposed General Plan policies listed above is to accommodate anticipated growth in a compact urban form, including mixed-use development, as well as focusing development along transit corridors and at other key locations. This impact is **less than significant.**

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Short-Term, Construction Emissions (Standards of Significance 2 and 3)

Impact 3.3.2 Subsequent land use activities associated with implementation of the proposed General Plan could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant and unavoidable** impact.

The Riverside County General Plan EIR found that despite the imposition of certain mitigation measures, construction-related impacts to air quality from implementation of the Riverside County General Plan cannot be fully mitigated to a level below significance.

Future growth in the City of Eastvale is guided by the land uses identified in the proposed General Plan Land Use Map. While implementation of the proposed Eastvale General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development, such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR, as the proposed City of Eastvale General Plan would not include changes to the existing Land Use Map.

Implementation of the proposed General Plan will result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. During construction, fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Demolition and renovation of buildings can also generate PM_{10} and $PM_{2.5}$ emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

The quantification of air quality impacts from future short-term, temporary construction activities in Eastvale under the proposed General Plan is not possible due to project-level variability and uncertainties related to future individual projects. However, all construction projects can produce nuisance dust emissions. All future development projects under the proposed General Plan would be subject to SCAQMD rules and regulations in effect at the time of construction. The following is a list of noteworthy rules that are potentially applicable to future projects:

- **Rule 402 (Nuisance)**—This rule prohibits the 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)**—This rule requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10}

emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

a. Portions of the construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized at all times.

e. Where vehicles leave the construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)**—This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

While these actions might not fully offset air pollutant emissions resulting from construction activities, projected growth under the proposed Eastvale General Plan would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR. Therefore, the proposed General Plan would not result in a new or substantially more severe significant impact compared with the currently adopted Riverside County General Plan. However, the Riverside County General Plan EIR found that despite the imposition of certain mitigation measures, construction-related impacts to air quality from implementation of the Riverside County General Plan cannot be fully mitigated to a level below significance. Since the proposed City of Eastvale General Plan does not change the existing Riverside County Land Use Map, this is considered a **significant and unavoidable** impact.

Violate Air Quality Standard or Contribute Substantially to an Air Quality Violation: Long-Term, Operational Emissions (Standards of Significance 2 and 3)

Impact 3.3.3 Subsequent land use activities associated with implementation of the proposed General Plan could result in long-term, operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant and unavoidable** impact.

The Riverside County General Plan EIR found that despite the imposition of certain mitigation measures, long-term, operational impacts to air quality from implementation of the Riverside County General Plan cannot be fully mitigated to a level below significance.

Future growth in the City of Eastvale is guided by the land uses identified in the proposed General Plan Land Use Map. The proposed General Plan retains the existing land use designations in the current Riverside County General Plan and, similarly, roadway classifications

and other physical planning in the Riverside County General Plan remain unchanged under the proposed Eastvale General Plan. While implementation of the proposed Eastvale General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development, such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR.

Table 3.3-6 summarizes the emissions associated with -out conditions with implementation of the proposed General Plan. As stated in the proposed General Plan, it is estimated that approximately 80 to 90 percent of the city's residential areas have already been built as of 2012. Therefore, a substantial amount of the emissions depicted in **Table 3.3-6** account for those currently being generated.

TABLE 3.3-6
CRITERIA POLLUTANT AND PRECURSOR EMISSIONS (BUILD-OUT)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Eastvale Build-out Conditions (Summer) – Pounds per Day						
Area Sources	3,174	104	7,343	14	945	945
Energy Sources	23	201	94	1	16	16
Mobile Sources	1,337	3,146	12,241	36	3,963	218
Total	4,534	3,451	19,678	52	4,924	1,179
Eastvale Build-out Conditions (Winter) – Pounds per Day						
Area Sources	3,174	104	7,343	14	945	945
Energy Sources	23	201	94	1	16	16
Mobile Sources	1,312	3,161	11,526	33	3,964	218
Total	4,510	3,466	18,963	49	4,925	1,180
Eastvale Build-out Conditions (Annual) – Tons per Year						
Area Sources	294	5	380	0	19	19
Energy Sources	4	37	17	0	3	3
Mobile Sources	188	469	1,774	5	551	33
Total	486	510	2,172	5	573	55

Source: CalEEMod, 2011 (see Appendix 3.3-1).

As shown in the table, build-out of the City of Eastvale would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which SoCAB is in nonattainment.

The build-out projections of the General Plan Planning Area under the proposed new General Plan Land Use Map are the same as projected under the existing Riverside County General Plan, as the proposed City of Eastvale General Plan will not include changes to the existing Land Use Map. Therefore, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed Eastvale General Plan. Therefore, while build-out of the City of Eastvale would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which SoCAB is in nonattainment, the proposed Eastvale General Plan would not result in a new or substantially more severe significant impact compared with the currently adopted Riverside County General Plan. However, the Riverside County

General Plan EIR found that despite the imposition of certain mitigation measures, operational-related impacts to air quality from implementation of the Riverside County General Plan cannot be fully mitigated to a level below significance. Since the proposed City of Eastvale General Plan does not change the existing Riverside County Land Use Map, this is considered a **significant and unavoidable** impact.

Exposes Sensitive Receptors to Substantial Carbon Monoxide Pollutant Concentrations (Standard of Significance 4)

Impact 3.3.4 Implementation of the proposed General Plan could result in population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide (CO) emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentrations. However, traffic volumes would not be large enough to generate excessive carbon monoxide emission levels. This is considered to be a **less than significant** impact.

Localized CO concentrations near roadway intersections are a function of traffic volume, speed, and delay (TACs are discussed under **Impact 3.3.5**). Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. Under specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels with respect to sensitive receptors, often referred to as a "CO hotspot."

The proposed General Plan could have a significant impact on localized CO concentrations if a traffic study indicates that the peak hour level of service (LOS) on one or more streets or at one or more intersections will be reduced to LOS E or F. If this above criteria can be associated with any road segment affected by the proposed General Plan, additional CO analysis would be needed to determine significance.

The traffic modeling conducted for this Draft EIR (see Section 3.2, Transportation and Traffic) projected that three road segments—Cantu-Galleano Ranch Road between S. Milliken Avenue and Interstate 15; Limonite Avenue between Hamner Avenue and Interstate 15; and Schleisman Road between Hamner Avenue and Interstate 15—will be reduced from LOS C to F as a result of build-out under the General Plan. Therefore, this impact does not meet the screening criteria listed above and additional CO analysis is needed to determine significance**.**

CO concentrations were modeled using the California Line Source Dispersion Model (CALINE4) with emission factors from the CARB Emissions Factor (EMFAC) 2011 computer model. To ensure a conservative analysis, predicted 1-hour and 8-hour CO concentrations were calculated assuming background CO concentrations of 1.3 and 1.9 parts per million (ppm), respectively, based on the most recent available data obtained from the nearest monitoring station (1-hour background concentrations based on 2011 measurements at the Mira Loma–10551 Bellegrave air quality monitoring station). A persistence factor of 0.7 was used to convert predicted hourly concentrations to 8-hour concentrations. The predicted 1-hour and 8-hour CO concentrations for future cumulative conditions are summarized in **Table 3.3-7**.

TABLE 3.3-7
PREDICTED LOCAL MOBILE SOURCE CARBON MONOXIDE CONCENTRATIONS BUILD-OUT CONDITIONS

Traffic Facility	Predicted CO Concentration (ppm)	
	1-hour	8-hour
Cantu-Galleano Ranch Road between S. Milliken Avenue and Interstate 15	1.8	1.3
Limonite Avenue between Hamner Avenue and Interstate 15	1.9	1.3
Schleisman Road between Hamner Avenue and Interstate 15	1.9	1.3
California Ambient Air Quality Standards (CAAQS)	20	9
Predicted Concentrations Exceed CAAQS?	No	No

Note: Predicted CO concentrations are the sums of a background component, which includes the cumulative effects of all CO sources in the project area vicinity and the proposed project's contribution.

As noted in **Table 3.3-7**, under future conditions predicted maximum 1-hour and 8-hour CO concentrations at the Eastvale roadway segments projected to operate at unacceptable levels of service would not exceed even the most stringent corresponding California ambient air quality standards (CAAQS) of 20 ppm and 9 ppm, respectively. Therefore, the proposed project would not contribute to localized concentrations of mobile-source carbon monoxide that would exceed applicable ambient air quality standards. Because the proposed General Plan would not be anticipated to result in or contribute to local CO concentrations that exceed the state 1-hour or 8-hour ambient air quality standards of 20 ppm or 9 ppm, respectively, this impact is considered to be **less than significant** and no mitigation measures are required.

Exposes Sensitive Receptors to Substantial Toxic Air Contaminant Concentrations (Standard of Significance 4)

Impact 3.3.5 Subsequent land use activities associated with implementation of the proposed General Plan could result in projects that would include sources of toxic air contaminants which could affect surrounding land uses. Subsequent land use activities could also place sensitive land uses near existing sources of toxic air contaminants. These factors could result in the exposure of sensitive receptors to substantial pollutant concentrations such as toxic air contaminants. However, the SCAQMD and state regulations would address exposure to toxic air contaminants. This is considered a **less than significant** impact.

Subsequent land use activities associated with implementation of the proposed General Plan could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources.

Short-Term Construction Sources

Implementation of the proposed General Plan would result in the potential construction of a variety of projects. This construction would result in short-term emissions of diesel PM, which was identified as a TAC by CARB in 1998. Construction would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards).

Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. For these reasons, diesel PM generated by construction activities, in and of itself, would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors.

Nevertheless, the construction emissions are regulated by SCAQMD. SCAQMD has developed localized significance thresholds (LSTs) for several emissions generated at construction sites including $PM_{2.5}$, produced when diesel fuel is burned. LSTs represent the maximum emissions at a construction site that are not expected to cause or contribute to an exceedance of the most stringent national or state AAQS. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects of five acres and less. Future construction activities would be required to met SCAQMD thresholds or implement mitigation.

Long-Term Operational Sources

In April 2005, the California Air Resources Board (CARB) released the *Land Use and Air Quality Handbook: A Community Health Perspective*, which offers guidance on siting sensitive land uses in proximity to sources of air toxics. Sensitive land uses identified in the handbook include residential communities, schools and schoolyards, day care centers, parks and playgrounds, hospitals, and medical facilities. In terms of mobile source emissions of TACs, CARB has provided guidelines to help determine appropriate land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway, such as I-15, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day should be avoided when possible.

The issuance of SCAQMD air quality permits and compliance with all SCAQMD, state, and federal regulations regarding stationary TACs reduce potential stationary sources of TAC emissions such that sensitive receptors would not be exposed to substantial air pollutant concentrations. SCAQMD limits public exposure to TACs through a number of programs. SCAQMD reviews the potential for TAC emissions from new and modified stationary sources through the SCAQMD permitting process for stationary sources. TAC emissions from existing stationary sources are limited by:

1) SCAQMD Rule 1401 which requires that construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112 (b) of the Clean Air Act be constructed with Best Available Control Technology and comply with all other applicable requirements.

2) Implementation of the Air Toxics "Hot Spots" (AB 2588) Program as described under the Regulatory Framework subsection above; and

3) Implementation of the federal Title III Toxics program.

Facilities and equipment that require permits from SCAQMD are screened from risks from toxic emissions and can be required to install Toxic Best Available Control Technology (T-BACT) to reduce the risks to below significant if deemed necessary by SCAQMD. T-BACTs are the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for TACs.

In addition to these requirements the proposed General Plan contains several policies that protect Eastvale from toxic air pollution. Policy AQ-5 states that sensitive receptors should be separated and protected from polluting point sources to the greatest extent possible, and Policy AQ-6 requires that site plan designs protect people and land uses sensitive from air pollution. Policy AQ-16 requires stationary pollution sources to minimize the release of toxic pollutants through design features, operating procedures, preventive maintenance, operator training, and emergency response planning.

Implementation of the proposed General Plan policies described above in combination with SCAQMD's permitting process and CARB guidance would minimize the exposure of air toxics affecting sensitive receptors. In addition, the Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant toxic air contaminant-related impacts. Since the proposed Eastvale General Plan would not include changes to the existing County of Riverside Land Use Map, as a result, no development differing from that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan.

No mitigation measures are required and this impact is considered **less than significant.**

Creates Objectionable Odors Affecting a Substantial Number of People (Standard of Significance 5)

Impact 3.3.6 Subsequent land use activities associated with implementation of the proposed General Plan could include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor. However, continued implementation of current SCAQMD rules and regulations as well as proposed General Plan provisions would address this issue. Thus, this impact is considered to be **less than significant**.

Subsequent land use activities associated with implementation of the proposed General Plan could allow for the development of uses that have the potential to produce odorous emissions either during the construction or operation of future development. Additionally, subsequent land use activities may allow for the construction of sensitive land uses (i.e., residential development, parks, offices, etc.) near existing or future sources of odorous emissions.

Future residential and commercial development would involve minor odor-generating activities, such as backyard barbecue smoke, lawn mower exhaust, application of exterior paints for home improvement, etc. These types and concentrations of odors are typical of residential communities and are not considered significant air quality impacts. However, future nonagricultural land uses adjacent to agricultural areas (dairies) has the potential to expose people to objectionable odors because the new sensitive uses would be adjacent to agricultural uses. For this reason Policy AQ-43 implements the City's Right to Farm ordinance and notifies prospective buyers of property adjacent to agricultural land uses that they could be subject to inconvenience or discomfort resulting from accepted farming activities. (However, at

build-out of the Eastvale General Plan, no agricultural uses are anticipated to remain in the city.) Consequently, these impacts would be temporary.

Future individual projects, including commercial, industrial, and residential projects, associated with implementation of the proposed General Plan are also required to comply with SCAQMD Rule 402 to prevent occurrence of public nuisances. As a result, project-related odors are required to avoid the creation of a public nuisance. Future construction activity would require the operation of equipment that may generate exhaust from either gasoline or diesel fuel. Construction and development would also require the application of paints and the paving of roads, which could generate odors from materials such as paints and asphalt. As these odors are short-term in nature and quickly disperse into the atmosphere, this is not considered significant.

Implementation of the proposed General Plan policies described above, which address odors resulting from agricultural activities, in combination with SCAQMD's Rule 402, would minimize the creation of objectionable odors affecting a substantial number of people. In addition, the Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant odor impacts and the proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan.

No mitigation measures are required and this impact is considered **less than significant.**

3.3.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The policy provisions in the proposed General Plan would provide direction for growth within the city limits, while the respective general plan policies of the jurisdictions surrounding Eastvale (Chino, Norco, Ontario, and Jurupa Valley) provide direction for growth outside the Eastvale city limits. Similar relationships between cities occur throughout the SoCAB. Thus, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the SoCAB.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Result in a Cumulatively Considerable Net Increase in Nonattainment Criteria Pollutant (Standard of Significance 3)

Impact 3.3.7 Implementation of the proposed General Plan, in combination with cumulative development in the SoCAB, would result in a cumulatively considerable net increase of ozone and coarse and fine particulate matter. This is considered a **less than cumulatively considerable** impact.

The SCAQMD's approach for assessing cumulative impacts is based on the 2007 AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state Clean Air Acts. As discussed earlier, the proposed General Plan would be consistent with the 2007 AQMP, which is intended to bring the SoCAB into attainment for all

criteria pollutants.[1] While the projected Eastvale build-out emissions calculated (see **Table 3.3-6**) surpass the applicable SCAQMD daily significance thresholds designed to assist the region in attaining the applicable state and national ambient air quality standards, approximately 80 to 90 percent of the city's residential areas have already been built as of 2012. Therefore, a substantial amount of the emissions depicted in **Table 3.3-6** account for those already being generated.

Furthermore, as previously stated, the build-out projections of the General Plan Planning Area under the proposed new Eastvale General Plan Land Use Map are the same as projected under the existing Riverside County General Plan as the proposed City of Eastvale General Plan will not include changes to the existing Land Use Map. Therefore, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed Eastvale General Plan and build-out assumptions for Eastvale would be the same as the build-out assumptions for the city in the 2003 Riverside County General Plan. Therefore, while build-out of the City of Eastvale would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which SoCAB is in nonattainment, the proposed Eastvale General Plan would not result in a new or substantially more severe significant impact compared with the currently adopted Riverside County General Plan. Thus, this impact is considered **less than cumulatively considerable**.

[1] CEQA Guidelines Section 15064(h)(3) states, "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

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3.4 WATER RESOURCES

This section of the DEIR identifies the groundwater quality in Eastvale and the surrounding area and evaluates any significant environmental impacts of the proposed General Plan with respect to water supply, and identifies the appropriate General Plan policies that would lessen the identified impacts.

3.4.1 EXISTING SETTING

REGIONAL HYDROLOGY

Chino Groundwater Basin

The City of Eastvale is located atop the Chino Groundwater Basin (Chino Basin) which is a part of the Upper Santa Ana Valley Groundwater Basin. The Chino Basin is the largest groundwater basin in the Upper Santa Ana River Watershed, consisting of approximately 154,000 acres, or 240 square miles (see **Figure 3.4-1**). The Chino Basin is located within portions of the counties of San Bernardino, Riverside, and Los Angeles. It is bounded on the east by the Rialto-Colton fault; on the southeast by the contact with impermeable rocks forming the Jurupa Mountains and low divides connecting the exposures. On the south, the Chino Basin is bounded by contact with impermeable rocks of the Puente Hills and by the Chino fault; on the northwest by the San Jose fault; and on the north by impermeable rocks of the San Gabriel Mountains and by the Cucamonga fault (JCSD 2011, p. 30). San Antonio Creek and Cucamonga Creek drain the surface of the Chino Basin southward to join Santa Ana River. Annual mean precipitation ranges from 13 to 29 inches across the surface of the Chino Basin and averages about 17 inches (JCSD 2011, p. 30).

The water-bearing units in the Chino Basin include the Older Alluvium of Pleistocene and Younger Alluvium of Holocene age. Older Alluvium is exposed mainly in the northern part of the Chino Basin and supplies most of the water to wells. It varies in thickness from about 200 feet thick near the southwestern end of Chino Basin to over 1,100 feet thick southwest of Fontana, and averages about 500 feet throughout the basin. Pumping capacities of wells completed in the Older Alluvium generally range between 500 and 1,500 gallons per minute (gpm). In the southern part of the Chino Basin where sediments tend to be more clayey, wells generally yield 100 to 1,000 gpm. The Younger Alluvium occupies streambeds, washes, and other areas of recent sedimentation. The Younger Alluvium varies in thickness from over 100 feet near the mountains to just a few feet south of Interstate 10, and generally covers most of the north half of the basin in undisturbed areas. The Younger Alluvium is not saturated and thus does not yield water directly to wells. Water percolates readily in the Younger Alluvium (JCSD 2011, p. 30).

The saturated sediments in the Chino Basin include a shallow aquifer system and at least one deep aquifer system. The shallow aquifer system is generally characterized by unconfined to semi-confined groundwater conditions, high permeability within its sand and gravel units, and high concentrations of dissolved solids and nitrate (especially in southern portions of Chino Basin which includes Eastvale).

The Chino Basin currently contains approximately 5,000,000 acre-feet (AF) of water and has an unused storage capacity of about 1,000,000 AF. Groundwater is produced from the Chino Basin by cities and other water supply entities and by about 300 to 400 agricultural users overlying the basin (JCSD 2011, p. 40).

Groundwater Quality

The City of Eastvale is sustained primarily by water from local groundwater from the Chino Basin provided by the Jurupa Community Services District (JCSD). The Chino Basin was adjudicated in 1978 pursuant to a judgment entered in the Superior Court of the state of California for the County of San Bernardino. Pumping within the Chino Basin is managed and reported by the Chino Basin Watermaster. The Chino Basin Watermaster is the oversight agency responsible for recharging and preventing overdraft within the Chino Basin (the Chino Basin Watermaster recharges the Chino Basin from the following sources: stormwater recharge, State Water Project (SWP) water purchased from Metropolitan Water District of Southern California, a SWP contractor, and recycled water). Groundwater management activities of the Chino Basin are implemented through an Optimum Basin Management Program (OBMP) that was developed for the Chino Basin in 2000, pursuant to the judgment. Pursuant to the judgment, the Watermaster files an annual report of Watermaster activities with the court each year. Upon completion of the OBMP in 2000, specific tasks and activities were assigned to Watermaster's legal and engineering services in the implementation of the OBMP. The Peace I Agreement signed in 2000 outlined the parties' intent to implement the OBMP as well as other responsibilities of the Watermaster and the parties to the agreement. The Peace II Agreement, signed in 2007, further detailed the OBMP measures for implementation. The OBMP consists of nine key elements covering a wide range of water activity in the Chino Basin, including a comprehensive groundwater monitoring program, a groundwater recharge program, a water supply plan for impaired service areas, and a groundwater storage plan among other elements.

JCSD is a party to the adjudication and the OBMP is implemented to manage water quality and other factors in the China Basin. Local groundwater generally does not have microbial water quality problems. Parasites, bacteria, and viruses are filtered out as the water percolates through the soil, sand, and rock on its way to the aquifer. Even so, disinfectants are added to local groundwater when it is pumped from wells to protect public health. Taste and odor problems from algae are not an issue with Chino Basin groundwater (JCSD 2011, p. 74).

There have been nitrate and total dissolved solids intrusion into the Chino Basin from previous dairy and agricultural users. With the completion of Chino Basin Desalter I, the construction of Chino Basin Desalter II and JCSD's Roger D. Teagarden Ion Exchange Plant, the treatment plants sufficiently treat these constituents (JCSD 2011, p. 74). In addition, the management plans in place for the Chino Basin, the regulatory oversight provided by the Regional Water Quality Control Board (RWQCB) particularly as they relate to salts, when combined with the treatment resulted in the delivered water quality meeting or exceeding the standards set for drinking water by the federal government and the California Department of Public Health (DPH). Thus reliability is not expected to be interrupted by the water quality of Chino Basin (JCSD 2011, p. 74).

Total Dissolved Solids

Total dissolved solids (TDS) are not considered a public health risk but rather relate to the aesthetic quality of water. Depending on the location and water usage, TDS can contribute to the corrosion of metal surfaces or have deleterious effects on sensitive crops. Taste, however, is the driving force behind the secondary Maximum Containment Levels (MCLs) from the state. Past customer surveys performed by the U.S. Environmental Protection Agency (USEPA) indicated that around 300 milligrams per liter (mg/L) of TDS taste was acceptable and around 1000 mg/L was not acceptable. Based on these taste surveys, a threshold of 500 mg/L was established for dissolved solids with an upper limit of 1000 mg/L.

Agricultural activities in the region have led to high TDS levels in the groundwater. The RWQCB regulates TDS through the Basin Plan Amendment adopted in 2004, which established salt balances for each of the impacted groundwater basins and regulates the discharge of additional salts to the Chino Basin. To prevent the further degradation of the groundwater, the Chino Basin Watermaster monitors the TDS levels from the various sources that are used to recharge the Chino Basin.

Nitrates

Salt and nitrate in the Chino Basin is the greatest concern for water quality with the southern part of the Chino Basin, which underlies Eastvale, having the highest TDS and nitrate levels of >500 mg/L. These levels are above the recommended secondary MCL of 500 mg/L. The California DPH places nitrate into the health risk category of "acute toxicity." Therefore, a single detection may result in public health concerns. The California DPH states that "infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen."

The most probable source of the nitrate levels in groundwater is past agricultural activities, specifically dairies within the Chino Basin. The Chino Basin Watermaster has identified three management practices to mitigate this contamination to ensure water quality does not impact the reliability of this groundwater supply. These management practices include: minimizing agricultural activities; desalting the water; and maximizing the stormwater recharge of the Chino Basin. The agricultural activities have been minimized with increased urbanization and recharge basins are operated to obtain the greatest levels of percolation from storm water.

Desalting the water has been effective in reducing TDS and nitrate levels in the Chino Basin. The Chino Desalter Authority provides a source of supply through desalting the water and transporting excess salts and nutrients in the form of brine out of the Chino Basin. Thus, according to the JCSD Urban Water Management Plan, the management practices of salt and nitrate balance, desalting for removal, and recharge leads to a sustainable supply of water from the Chino Basin. Since 2005, JCSD reported that all samples of *delivered* water were below the state and federal MCL of 45 mg/L (JCSD 2011, p. 74). This is due to the management practices within the service area. JCSD has obtained a permit from the California DPH that allows high nitrate water to be blended with lower nitrate waters. This approach results in a level of nitrate consistently below the MCL.

Aquifer Protection

The greatest threats to the Chino Basin are agricultural activities through pesticides and the raising of livestock on dairies which contributed to high nitrate and TDS levels. Urbanization of the area has reduced the agricultural threat to the groundwater and few agricultural activities are now present in the region. Also, the Chino Basin Watermaster ensures that the TDS loading from recycled water and imported water sources is balanced within the Chino Basin so as not to further increase already elevated TDS levels.

WATER SUPPLY AND SERVICE

Jurupa Community Services District

As previously stated, the City of Eastvale is sustained primarily by water from local groundwater from the Chino Basin provided by the JCSD. Water service with JCSD began in 1966 with the

consolidation of three local agencies providing water at that time: Jurupa Heights Water Company, the La Bonita Mutual Water Company and the Monte Rue Acres Mutual Water Company. JCSD serves an area of 48 square miles in Riverside County (JCSD 2011, p. 5). The service area of JCSD is shown on **Figure 3.4-2**. However is it of note that existing agricultural uses within Eastvale (dairy) rely on their own wells for water supply and not on JCSD.

JCSD relies predominantly on groundwater and desalinated brackish groundwater from the Chino Groundwater Basin. However, as stated above, the Chino Basin Watermaster recharges the Chino Basin from stormwater recharge, SWP water purchased from Metropolitan Water District of Southern California, and recycled water. JCSD currently has 16 wells, eight booster stations, and 15 reservoirs of 53.7 million-gallon capacity (JCSD 2011, p. 5). There are two small irrigation water systems located in JCSD, one in Sunnyslope and the other in Eastvale.

The board of directors and staff, in order to better ensure a continuing supply of good quality water for current citizens and also future development, participate in a Joint Powers Authority (JPA) with another neighboring water purveyor, the Chino Desalter Authority (CDA).

The CDA owns and operates two water treatment plants (desalters) for the removal of TDS and nitrates in the Chino Basin. Both desalters utilize reverse osmosis (RO) and ion exchange (IX) treatment processes to remove the nitrates from the groundwater (JCSD 2011, p. 5). The treatment capacity for each plant is 12 million gallons per day (MGD) (JCSD 2011, p. 5). JCSD has a contractual obligation to purchase 7.9 MGD. (8,200 acre feet per year (AFY)) The CDA expanded capacity beyond the Chino I desalter by adding the Chino II desalter which processes 10.5 MGD for a total of 22.5 MGD. The Chino II desalter is also in the process of expanding from 10.5 MGD to 20.5 MGD of which JCSD's contractual capacity will be 3 MGD or 3,300 AFY (JCSD 2011, p. 5).

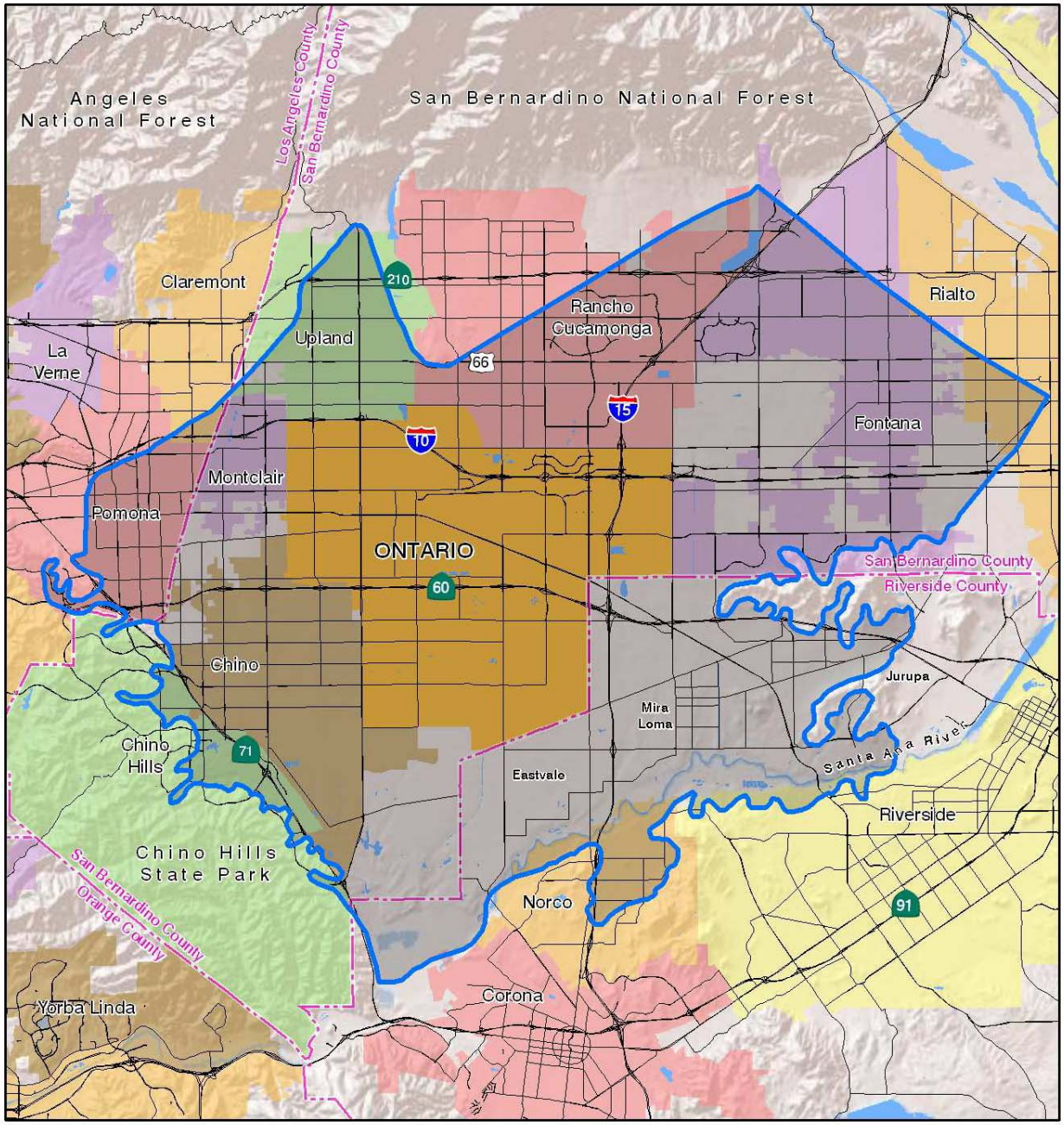
JCSD Water Supply

As previously discussed, JCSD produces water from groundwater sources from the Chino Basin, which was adjudicated by a judgment in 1978. The judgment represents a plenary adjudication of all water rights in the Chino Basin and is administered under the authority of the Watermaster with continuing jurisdiction by the court. The judgment declares that the safe yield of the Chino Basin is 140,000 AFY, which is allocated among the three pools as follows:

- Overlying Agricultural Pool: 82,800 AFY
- Overlying Non-Agricultural Pool: 7,366 AFY
- Appropriative Pool: 49,834 AFY

A fundamental premise of the judgment is that all Chino Basin water users will be allowed to pump sufficient water from the Chino Basin to meet their requirements. To the extent that pumping exceeds the share of the safe yield, assessments are levied by the Watermaster to replace the overproduction (JCSD 2011, p. 36). **Table 3.5-1** shows the amount of current (2011) and future groundwater pumping rights and contracted water entitled for the JCSD service area. (JCSD's entitlement increases with each agricultural land conversion to an urbanized use. JCSD has a contractual obligation to purchase 8,200 AFY from CDA as described above and also buys 1,200 AFY from the Santa Ana River Water Company.)

FIGURE 3.4-1 CHINO GROUNDWATER BASIN



Source: MWDSC 2007

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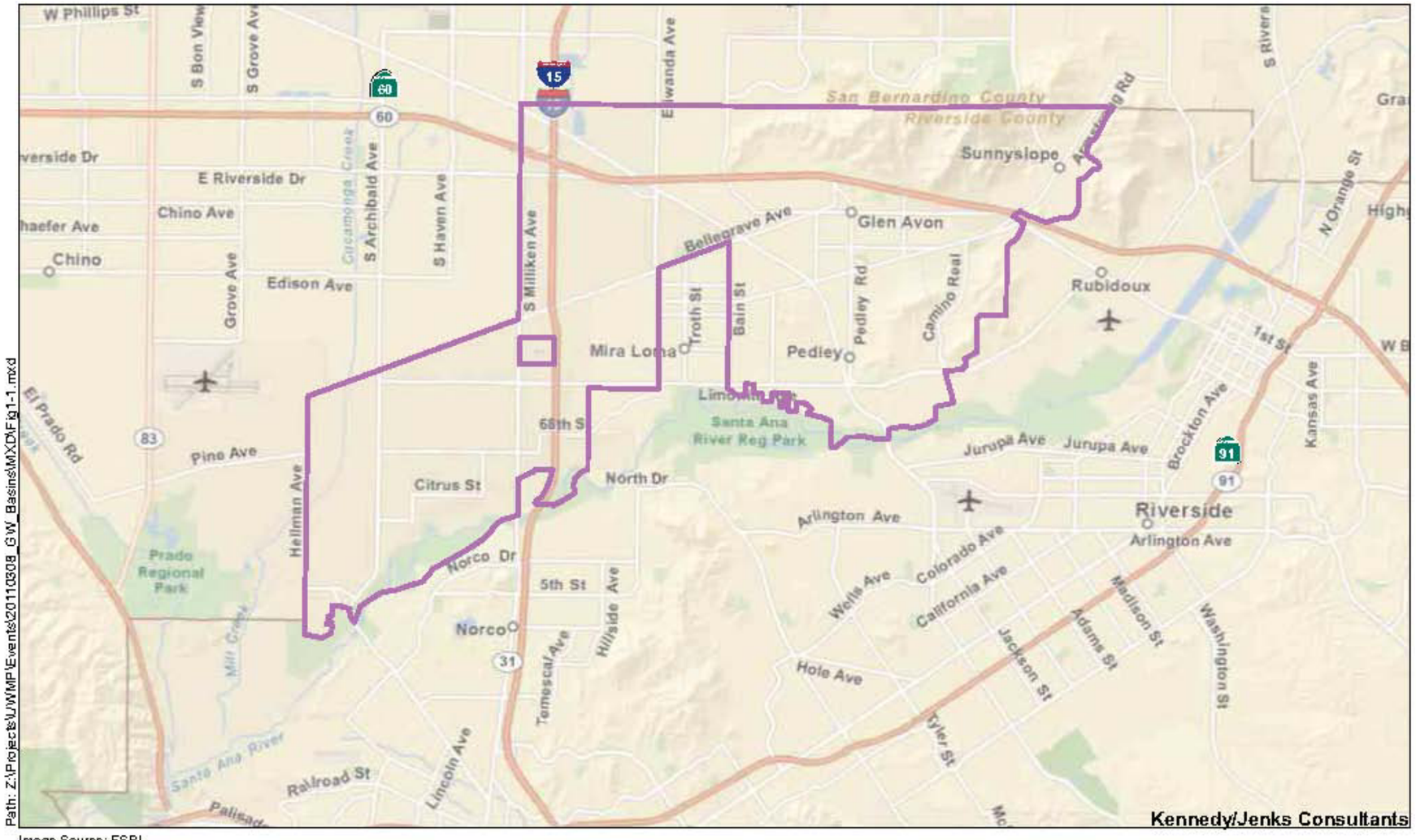
FIGURE 3.4-2 JCSD SERVICE AREA



Path: Z:\Projects\UWMP\Events\20110308_GW_Basins\MXD\Fig1-1.mxd

Image Source: ESRI

Legend

JCSD Service Area

N

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Miles

JCSD-2010 UWMP Update
Riverside County, California

Service Area

K/J 1088021*00
May 2011

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TABLE 3.5-1
JCSD CURRENT AND FUTURE GROUNDWATER PUMPING RIGHTS

Current Pumping Rights / Contract Amount	Future Pumping Rights / Contract Amount
24,083 acre-feet /year	31,500 acre-feet/year

Source: JCSD 2011, p. 38

The principal function of adjudication generally is to control the use of a water source in order to ensure the source is utilized in an optimum manner. The judgment does not place specific limits upon the groundwater production by any party to the judgment, including JCSD. Each of the parties to the judgment, divided into three pools, are prohibited from pumping the Chino Basin in excess of their rights except pursuant to the provisions of the "Physical Solution" (JCSD 2011, p. 40). As described earlier, additional groundwater production in excess of the safe yield is allowed by the adjudication provided that the pumped water is replaced with replenishment water. Historically, the Watermaster has purchased imported water from the Metropolitan Water District to provide replenishment water when pumping exceeds the safe yield of the Chino Basin.

Table 3.5-2 presents JCSD's historical total groundwater pumping from 2005 to 2009, including pumping from the JCSD's existing wells, CDA-purchased desalinated water, and pumping from the Riverside Basin which produces a small amount of nonpotable water each year for JCSD. Pumping amounts are presented by production years (fiscal year ending June 30). On average, about 81 to 97 percent of water used in the service area was from groundwater extraction. The majority of pumping was in the Chino Basin, pursuant to the judgment and through the CDA (JCSD 2011, p. 39).

TABLE 3.5-2
HISTORICAL GROUNDWATER PRODUCTION (AFY) BY PRODUCTION YEAR

Source	2005	2006	2007	2008	2009
Chino Basin (potable)	16,476	18,241	17,439	18,114	13,805
CDA Purchases (potable)	3,476	8,351	8,797	8,623	8,675
Chino Basin (nonpotable)	211	207	250	259	212
Riverside Basin (nonpotable)	507	267	605	592	507
Total	20,670	27,066	27,091	27,588	23,199

Source: JCSD 2011, p. 39

Water Supply Reliability

Each water supply source has its own reliability characteristics. In any given year, the variability in weather patterns around the state may affect the availability of supplies to the Chino Basin. For example, from 2000 through 2002, Southern California experienced dry conditions in all three years. JCSD was able to provide sufficient water due to a diverse portfolio which currently includes a connection to another agency (Rubidoux CSD), access to the CDA, and local groundwater including a lease of up to 1,200 AFY of water rights from the Santa Ana River Water Company (SARWC) (JCSD 2011, p. 79). Membership to CDA also allows for access to other sources of supply from the six other CDA members (Western MWD, SARWC, Cities of Ontario, Norco, Chino, and Chino Hills), further increasing water supply reliability (JCSD 2011, p. 79). To ensure greater reliability, JCSD intends to increase its water portfolio by pursuing water from Western MWD via the Riverside Corona Feeder, the Riverside Basin, and recycled water (JCSD

2011, p. 79). If one supplier reduces deliveries then additional supply can be acquired through other suppliers.

As discussed above, JCSD's supply comes nearly entirely from the Chino Basin distributed amongst various suppliers. An assumption associated with the adjudication of the Chino Basin was that all suppliers would be allowed to pump sufficient groundwater from the Chino Basin. The Chino Basin Watermaster has the responsibility of ensuring sustainable use of the groundwater within the region with a declared safe yield of 140,000 AFY. Only when pumping exceeds the safe yield does the Watermaster impose assessments to replace overproduction which is called a replenishment obligation. Water pumped in excess of safe yield is available for pumping but is charged a higher rate in order to cover the cost of replenishment. The 2000 OBMP, previously described, protects the Chino Basin from overproduction by way of nine elements.

Stormwater, imported water from the SWP, and recycled water contribute to the recharge of the Chino Basin. Stormwater recharge is affected by changes in the local hydrology. The amount of SWP water allocated to contractors each year is dependent on a number of factors, including hydrology that can vary significantly from year to year. The primary factors affecting SWP supply availability include hydrologic conditions in Northern California, the amount of water in SWP storage reservoirs at the beginning of the year, regulatory and operational constraints, and the total amount of water requested by the contractors. The availability of SWP supplies to SWP contractors is generally less than their full entitled amounts in many years and can be significantly less in very dry years. The Department of Water Resource's (DWR) SWP Delivery Reliability Report for 2009, issued in 2010, assists SWP contractors in assessing the reliability of the SWP component of their overall supplies (JCSD 2011, p. 80). DWR provided these updated delivery reliability estimates to the SWP contractors for planning purposes. The most recent reports states that the reliability of this water is subject to biological demands and climate change (JCSD 2011, p. 80). The affects of SWP delivery does not directly affect JCSD's supplies and only through the actions and responses of the Chino Basin Watermaster to the Metropolitan Water District's SWP allocations will the supply potentially change over the long term. Under current agreements, JCSD's groundwater, when pumped in accordance with the judgment, is not anticipated to change regardless of allotments from the SWP (JCSD 2011, p. 80).

The Chino Basin depends on local and imported supplies located in two distinct hydrologic regions of the state. As seen previously, a drought in Southern California may not necessarily mean a drought in Northern California exists. The diverse portfolio of the Chino Basin and JCSD ensures a reliable future water supply for the service area (JCSD 2011, p. 80).

Supply and Demand Comparison

According to the JCSD 2011 Urban Water Management Plan, the available supplies and water demands for JCSD's service area were analyzed to determine the region's ability to satisfy demands during three scenarios: a normal water year, single-dry year, and multiple-dry years. The analysis concluded that JCSD has adequate supplies to meet demands during normal, single-dry, and multiple-dry years throughout the 20-year planning period. There is no difference in the supply and the demand since the local groundwater supplies will be pumped according to the demand (JCSD 2011, p. 86).

3.4.2 REGULATORY FRAMEWORK

FEDERAL

National Pollutant Discharge Elimination System

As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States, which in turn could make its way to the groundwater. It is the responsibility of the water boards, such as the Santa Ana RWQCB, to preserve and enhance the quality of the state's waters through the development of water quality control plans and the issuance of waste discharge requirements (WDRs). WDRs for discharges to surface waters also serve as NPDES permits.

Under Phase I, which started in 1990, the regional water quality control boards have adopted NPDES stormwater permits for medium (serving between 100,000 and 250,000 people) and large (serving more than 250,000 people) municipalities. The State Water Resources Control Board (SWRCB) adopted a General Permit for the Discharge of Storm Water from Small MS4s (WQ Order No. 2003-0005-DWQ) to provide permit coverage for smaller municipalities, including nontraditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes. The MS4 permits require the discharger to develop and implement a stormwater management plan/program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach, illicit discharge detection and elimination, construction and post-construction, and good housekeeping for municipal operations.

Under Phase II requirements, dischargers in any location whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the statewide General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit generally includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit (CGP) requires the development and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices the discharger will use to protect stormwater runoff and the placement of those BMPs.

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 law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. The SDWA applies to every public water system in the United States but does not regulate private wells which serve fewer than 25 individuals.

The SDWA authorizes the USEPA 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 primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments changed 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. This approach is intended to ensure the quality of drinking water by protecting it from source to tap (USEPA 2009).

STATE

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) is composed of nine regional water quality control boards responsible for preserving California's water quality. The regional water quality control boards issue waste discharge permits, take enforcement action against violators, and monitor water quality. SWRCB and the regional water quality control boards jointly administer most of the federal clean water laws. However, SWRCB retains oversight responsibility and, like the USEPA, may intervene if it determines a proposed project is not in compliance with SWRCB regulations.

California Water Plan Update 2009

The California Water Plan is the state's blueprint for integrated water management and sustainability. The California DWR updates the California Water Plan approximately every five years. California Water Plan Update 2009 is the latest edition and provides statewide strategic plan for water management to the year 2050. The California Water Plan provides framework and resource management strategies promoting two major initiatives: integrated regional water management that enables regions to implement strategies appropriate for their own needs and helps them become more self-sufficient, and improved statewide water management systems that provide for upgrades to large physical facilities, such as the SWP, and statewide management programs essential to the California economy (DWR 2009a).

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610–10656). The act states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 AF of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The act describes the contents of the Urban Water Management Plans (UWMP) as well as how urban water suppliers should adopt and implement the plans. It is the intention of the act to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied (DWR 2009c).

Senate Bill 610

Senate Bill (SB) 610 makes changes to the Urban Water Management Planning Act to require additional information in Urban Water Management Plans if groundwater is identified as a source available to the supplier. Required information includes a copy of any groundwater management plan adopted by the supplier, a copy of the adjudication order or decree for adjudicated basins, and if nonadjudicated, whether the basin has been identified as being overdrafted or projected to be overdrafted in the most current California DWR publication on

that basin. If the basin is in overdraft, the plan must include current efforts to eliminate any long-term overdraft. A key provision in SB 610 requires that any project subject to the California Environmental Quality Act (CEQA) supplied with water from a public water system be provided a specified water supply assessment, except as specified in the law (DWR, 2009b).

Assembly Bill 901

Assembly Bill 901 requires Urban Water Management Plans to include information relating to the quality of existing sources of water available to an urban water supplier over given time periods and the manner in which water quality affects water management strategies and supply (DWR 2009b).

Senate Bill 221

SB 221 prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to increases of 10 percent or more of service connections for public water systems with fewer than 500 service connections. The law defines criteria for determining "sufficient water supply" such as using normal, single-dry, and multiple-dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses. Rights to extract additional groundwater, if groundwater is to be used for a project, must be substantiated (DWR 2009b).

3.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The Draft EIR impact analysis is based on the *changes* between the currently adopted Riverside County General Plan and the proposed new General Plan (see Section 3.0, Introduction to the Environmental Analysis).

As stated in the Initial Study prepared for the proposed General Plan, the proposed City of Eastvale General Plan would not include changes to the existing Land Use Map and, as a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur as a result of the proposed General Plan.

The Initial Study prepared for the proposed General Plan concluded that even though no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur as a result of the proposed General Plan, impacts to Eastvale's water supply and the groundwater aquifer it comes from could potentially occur.

Based on Appendix G of the CEQA Guidelines, water supply impacts are considered to be significant if the following could result from the implementation of the proposed General Plan:

1) 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.)

2) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

METHODOLOGY

Evaluation of potential water supply impacts was based primarily on JCSD's 2010 Urban Water Management Plan. This material was then compared to the proposed General Plan specific water service-related impacts. The analysis includes a comparison of potential water demand and supplies at build-out of proposed land uses in the city. The reader is referred to Section 3.0, Introduction to the Environmental Analysis, for a discussion of assumed land uses and development conditions associated with the proposed build-out of Eastvale.

The following proposed General Plan policies address impacts to water supply-related issues:

Policy LU-9: *The City will participate in regional efforts to address issues of mobility, transportation, traffic congestion, economic development, air and water quality, and watershed and habitat management with cities, local and regional agencies, stakeholders, and surrounding jurisdictions.*

Policy LU-31: *The City will work with other agencies to coordinate development with supporting infrastructure and services, such as water and sewer service, libraries, parks and recreational facilities, transportation systems, and fire/police/medical services.*

ACTION LU-31.1: *Monitor the capacities of infrastructure systems and public services in coordination with service providers, utilities, and outside agencies.*

Policy LU-32: *Adequate and available circulation facilities, water resources, and sewer facilities should be available to meet service demands as development occurs.*

Policy AQ-21: *The City encourages the installation of water-conserving systems such as dry wells and greywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.*

Policy AQ-22: *The City encourages the decrease of stormwater runoff by reducing pavement in development areas, and by design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention.*

Policy AQ-23: *The City encourages native, drought-resistant landscape planting.*

Policy AQ-25: *Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.*

Policy S-9: *Any substantial modification to a watercourse shall be done in the least environmentally damaging manner possible in order to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.*

The analyses identify and describe how specific policies as well as other regulations and standards provide enforceable requirements and/or performance standards that address water quality and water supply and avoid or minimize significant impacts.

PROJECT IMPACTS AND MITIGATION MEASURES

Groundwater Quality Impacts (Standard of Significance 1)

Impact 3.4.1 Implementation of the proposed General Plan could result in the degradation of groundwater quality and may violate water quality standards and/or degrade water quality resulting from future land uses. However, implementation of proposed General Plan policy provisions and continued implementation of current standards would ensure that groundwater quality is protected. This impact is considered **less than significant**.

The greatest threats to the Chino Basin, which underlies Eastvale and is the primary source of its water supply, are agricultural activities through pesticides and the raising of livestock on dairies which contribute to high nitrate and TDS levels. However, urbanization of the area has reduced the agricultural threat to the groundwater and few agricultural activities are now present in the region.

Urbanized areas contain a different cadre of threats to groundwater. Future development of Eastvale under the proposed General Plan could generate runoff containing oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals), household pollutants, nutrients (i.e., fertilizers), and other chemicals from landscaped areas. The groundwater in this area is vulnerable to contamination from urban activity in this area—including construction, grading, use of equipment and automobiles, sewer leakage, and other potential contaminants—if not properly treated with water quality controls. However, as mentioned above under Regulatory Framework, the NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States that can eventually end up in the groundwater.

The California Stormwater Quality Association has prepared technical studies regarding water quality control feature impacts on groundwater in the Stormwater Best Management Practice Handbooks. These studies have identified that water quality control features (when inspected and monitored properly) such as infiltration basins have been successful in controlling water quality and avoiding groundwater quality impacts. (Metals and organic compounds associated with stormwater are typically captured or trapped within the first few feet of the soil of the stormwater infiltration basins). Proposed General Plan Policy AQ-22 seeks to decrease stormwater runoff in Eastvale by reducing pavement in development areas, and by design practices such as permeable parking bays, porous parking lots, and stormwater infiltration basins.

Furthermore, the OBMP will continue to guide Chino Groundwater Basin activities. The OBMP contains several elements designed to provide enhanced management of the local groundwater basin resource, including protection of water quality. Any impacts to the water quality associated with the proposed General Plan would be mitigated by a combination of recharge and other groundwater management activities accomplished by the Chino Basin parties, and coordinated by the Watermaster.

The OBMP implements activities that capture and dispose of contaminated groundwater, treat contaminated groundwater for direct high-priority beneficial uses, and encourage better

management of waste discharges that impact groundwater. According to the OBMP, the following activities will protect and enhance water quality:

- Treat contaminated groundwater to meet beneficial uses. Groundwater in some parts of the Chino Basin is not produced because of groundwater contamination problems. Groundwater quality can be protected by intercepting contaminants before they spread. Intercepted groundwater could be treated and used directly for high priority beneficial uses or injected back to the aquifer.

- Monitor and manage the Chino Basin to reduce contaminants and to improve water quality. Actively assisting and coordinating with the RWQCB, the USEPA, and other regulatory agencies in water quality management activities would help improve water quality in the Chino Basin.

- Manage salt accumulation through dilution or blending, and the export of salt.

- Address problems posed by specific contaminants (CBW 1999, p. 3-3).

The Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant impacts to groundwater quality and groundwater recharge. The proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan. Furthermore, as previously stated, the OBMP consists of nine key elements covering a wide range of water activity in the Chino Basin, including a comprehensive groundwater monitoring program, a groundwater recharge program, a water supply plan for impaired service areas, and a groundwater storage plan among other elements. To prevent the further degradation of the groundwater, the Chino Basin Watermaster monitors the TDS levels from the various sources used to recharge the Chino Basin.

The proposed General Plan would result in no greater impact to the Chino Groundwater Basin than that previously disclosed in the Riverside County General Plan EIR. Impacts to groundwater with implementation of the proposed General Plan would be **less than significant**.

Water Supply Demand and Environmental Effects (Standard of Significance 2)

Impact 3.4.2 Implementation of the proposed General Plan could increase demand for water supply and thus require increased groundwater production, which could result in significant effects on the physical environment. However, adequate groundwater supply sources exist, and proposed General Plan policy provisions and JCSD's water conservation provisions would ensure adequate water service. This is considered a **less than significant** impact.

Full build-out of Eastvale would result in an increase of 8,030 persons in the city compared with the current population, for a total population of 61,698. At build-out of Eastvale, water supply would continue to be provided by JCSD. The JCSD 2010 Urban Water Management Plan identifies per capita water demand in the JCSD service area as 248.3 gallons per day (gpd) per person, which is based on a 15-year range (JCSD 2011, p. 22-23). Applying those factors to the growth anticipated in Eastvale would equate to an increase in water demand of 1,993,849 gpd over baseline conditions (8,030 additional persons x 248.3 gpd per person).

Additional water supply would be necessary to serve nonresidential customers as well; however, the exact number and specific type of nonresidential connections cannot be determined until specific development projects are proposed. According to the JCSD 2011 Urban Water Management Plan, the available supplies and water demands for JCSD's service area were analyzed to access the region's ability to satisfy demands during three scenarios: a normal water year, single-dry year, and multiple-dry years. The analysis concluded that JCSD has adequate supplies to meet demands during normal, single-dry, and multiple-dry years throughout the 20-year planning period (to Year 2030). There is no difference in the supply and the demand since the local groundwater supplies will be pumped according to the demand (JCSD 2011, p. 86). The proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map and, as a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan. Therefore, build-out of Eastvale would not require additional groundwater beyond that discussed in the JCSD 2010 Urban Water Management Plan, given that proposed General Plan growth capacity would not change the city's anticipated water needs for year 2030.

In addition, the proposed General Plan proposes several water conservation provisions. For instance, Policy LU-31 requires that adequate and available water resources are available to meet service demands as development occurs. Also, the City encourages the installation of water-conserving systems such as dry wells and greywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators is also encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms (Policy AQ-21). Policy S-9 mandates that any substantial modification to a watercourse shall be done in a manner to maximize groundwater recharge.

For the reasons identified, this impact is considered **less than significant**.

3.4.2 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting consists of the Chino Groundwater Basin. Additionally, the cumulative setting includes anticipated development described in **Table 3.0-2** that could contribute to cumulative water resource impacts.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Water Resource Impacts (Standards of Significance 1 and 2)

Impact 3.4.3 Implementation of the proposed General Plan, in combination with current land uses in the surrounding region, could introduce substantial grading, site preparation, and an increase in urbanized development. Increased development would contribute to cumulative groundwater quality impacts as well as increase the cumulative demand for water supplies that are considered **less than cumulatively considerable**.

As described under Impacts 3.4.1 and 3.4.2, the proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan. Therefore, the proposed Eastvale General Plan would result in no greater impact to the Chino Groundwater Basin than that previously disclosed in the Riverside County General Plan EIR.

Pumping within the Chino Basin is managed and reported by the Chino Basin Watermaster. The Chino Basin Watermaster is the oversight agency responsible for recharging and preventing overdraft within the Chino Basin. Groundwater management activities of the Chino Basin are implemented through the OBMP that was developed for the Chino Basin in 2000, pursuant to the judgment, described previously. Pursuant to the judgment, the Watermaster files an annual report of Watermaster activities with the Court each year. Upon completion of the OBMP in 2000, specific tasks and activities were assigned to Watermaster's legal and engineering services in the implementation of the OBMP. A fundamental premise of the judgment is that all Chino Basin water users will be allowed to pump sufficient water from the Chino Basin to meet their requirements. To the extent that pumping exceeds the share of the safe yield, assessments are levied by the Watermaster to replace the overproduction (JCSD 2011, p. 36).

The OBMP will continue to guide Chino Groundwater Basin activities. The OBMP contains several elements designed to provide enhanced management of the local groundwater basin resource, including protection of the water supply of the basin. Any impacts to the Chino Basin associated with the proposed General Plan would be mitigated by a combination of recharge and other groundwater management activities accomplished by the Chino Basin parties, and coordinated by the Watermaster.

Implementation of the proposed General Plan policies, as well as the continued efforts of the Watermaster, would ensure that the proposed General Plan's contribution to cumulative water quality and water supply impacts would be mitigated. Thus this impact would be **less than cumulatively considerable**.

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3.5 Greenhouse Gases and Climate Change

This section of the Draft EIR provides a discussion of the project's effect on greenhouse gas emissions and the associated effects of climate change. The California Environmental Quality Act (CEQA) requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval.

3.5.1 EXISTING SETTING

EXISTING CLIMATE SETTING

Since the early 1990s, scientific consensus holds that the world's population is releasing greenhouse gases (GHG) faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, energy use, land-use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), creates a blanket around the earth that allows light to pass through but traps heat at the surface preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

While often used interchangeably, there is a difference between the terms "climate change" and "global warming." According to the National Academy of Sciences, climate change refers to any significant, measurable change of climate lasting for an extended period of time that can be caused by both natural factors and human activities. Global warming, on the other hand, is an average increase in the atmosphere's temperature caused by increased GHG emissions. The use of the term climate change is becoming more prevalent because it encompasses all changes to the climate, not just temperature.

To fully understand global climate change, it is important to recognize the naturally occurring greenhouse effect and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Table 3.5.1 provides descriptions of the primary GHGs attributed to global climate change, including a description of their physical properties, primary sources, and contribution to the greenhouse effect.

TABLE 3.5.1
GREENHOUSE GASES

Greenhouse Gas	Description
Carbon Dioxide (CO_2)	Carbon dioxide (CO2) is a colorless, odorless gas. CO2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO2 emissions. The atmospheric lifetime of CO2 is variable because it is so readily exchanged in the atmosphere.1
Methane (CH_4)	Methane (CH4) is a colorless, odorless gas that is not flammable under most circumstances. CH4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years.2
Nitrous Dioxide (N_2O)	Nitrous oxide (N_2O) is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]
Hydrofluorocarbons (HFCs)	Hydrofluorocarbons (HFCs) are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years).[4]
Perfluorocarbons (PFCs)	Perfluorocarbons (PFCs) are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_{14}). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for CF_4 and C_2F_6 are 50,000 and 10,000 years, respectively (USEPA 2010b).[4,5]
Sulfur Hexafluoride (SF_6)	Sulfur hexafluoride (SF_6) is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Significant leaks occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years.[4]

Source: [1]USEPA 2011a, [2]USEPA 2011b, [3]USEPA 2010a, [4]USEPA 2010b, [5]EFCTC 2003

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Gases with high global-warming potential, such as HFCs, PFCs, and SF_6, are the most heat absorbent. Methane traps over 21 times more heat per molecule than CO_2, and N_2O absorbs 310 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential (GWP). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. **Table 3.5-2** shows the GWPs for different GHGs for a 100-year time horizon.

TABLE 3.5-2
GLOBAL WARMING POTENTIAL FOR GREENHOUSE GASES

Greenhouse Gas	Global Warming Potential
Carbon Dioxide (CO_2)	1
Methane (CH_4)	21
Nitrous Dioxide (N_2O)	310
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs)	6,500
Sulfur Hexafluoride (SF_6)	23,900

Source: California Climate Action Registry 2009

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is a significant emitter of CO_2 in the world and produced 477 million gross metric tons of CO_2 equivalents in 2008 (CARB 2010a). Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.4 percent of total GHG emissions in the state (CARB 2010a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (24.3 percent) and the industrial sector (19.3 percent) (CARB 2010a).

EFFECTS OF GLOBAL CLIMATE CHANGE

California can draw on substantial scientific research conducted by experts at various state universities and research institutions. With more than a decade of concerted research, scientists have established that the early signs of climate change are already evident in the state—as shown, for example, in increased average temperatures, changes in temperature extremes, reduced snowpack in the Sierra Nevada, sea level rise, and ecological shifts.

Many of these changes are accelerating—locally, across the country, and around the globe. As a result of emissions already released into the atmosphere, California will face intensifying climate changes in coming decades (CNRA 2009). Generally, research indicates that California should expect overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea-level rise. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing (CNRA 2009).

Climate change temperature projections identified in the 2009 California Climate Adaptation Strategy suggest the following (CNRA 2009):

- Average temperature increase is expected to be more pronounced in the summer than in the winter season.
- Inland areas are likely to experience more pronounced warming than coastal regions.
- Heat waves are expected to increase in frequency, with individual heat waves also showing a tendency toward becoming longer, and extending over a larger area, thus more likely to encompass multiple population centers in California at the same time.
- As GHGs remain in the atmosphere for decades, temperature changes over the next 30 to 40 years are already largely determined by past emissions. By 2050, temperatures are projected to increase by an additional 1.8 to 5.4 °F (an increase one to three times as large as that which occurred over the entire 20th century).
- By 2100, the models project temperature increases between 3.6 to 9 °F.

According to the 2009 California Climate Adaptation Strategy, the impacts of climate change in California have the potential to include, but are not limited to, the areas discussed in **Table 3.5-3** below.

TABLE 3.5-3
POTENTIAL STATEWIDE IMPACTS FROM CLIMATE CHANGE

Potential Statewide Impact	Description
Public Health	Climate change is expected to lead to an increase in ambient (i.e., outdoor) average air temperature, with greater increases expected in summer than in winter months. Larger temperature increases are anticipated in inland communities as compared to the California coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Numerous studies have indicated that there are generally more deaths during periods of sustained higher temperatures, and these are due to cardiovascular causes and other chronic diseases. The elderly, infants, and socially isolated people with pre-existing illnesses who lack access to air conditioning or cooling spaces are among the most at risk during heat waves.
Floods and Droughts	The impacts of flooding can be significant. Results may include population displacement, severe psychosocial stress with resulting mental health impacts, exacerbation of pre-existing chronic conditions, and infectious disease. Additionally, impacts can range from a loss of personal belongings, and the emotional ramifications from such loss, to direct injury and/or mortality. Drinking water contamination outbreaks in the U.S. are associated with extreme precipitation events. Runoff from rainfall is also associated with coastal contamination that can lead to contamination of shellfish and contribute to food-borne illness. Floodwaters may contain household, industrial, and agricultural chemicals as well as sewage and animal waste. Flooding and heavy rainfall events can wash pathogens and chemicals from contaminated soils, farms, and streets into drinking water supplies. Flooding may also overload storm and wastewater systems, or flood septic systems, also leading to possible contamination of drinking water systems. Drought impacts develop more slowly over time. Risks to public health that Californians may face from drought include impacts on water supply and quality, food production

Potential Statewide Impact	Description
	(both agricultural and commercial fisheries), and risks of waterborne illness. As surface water supplies are reduced as a result of drought conditions, the amount of groundwater pumping is expected to increase to make up for the water shortfall. The increase in groundwater pumping has the potential to lower the water tables and cause land subsidence. Communities that utilize well water will be adversely affected by drops in water tables or through changes in water quality. Groundwater supplies have higher levels of total dissolved solids compared to surface waters. This introduces a set of effects for consumers, such as repair and maintenance costs associated with mineral deposits in water heaters and other plumbing fixtures, and on public water system infrastructure designed for lower salinity surface water supplies. Drought may also lead to increased concentration of contaminants in drinking water supplies.
Water Resources	The state's water supply system already faces challenges to provide water for California's growing population. Climate change is expected to exacerbate these challenges through increased temperatures and possible changes in precipitation patterns. The trends of the last century—especially increases in hydrologic variability—will likely intensify in this century. The State can expect to experience more frequent and larger floods and deeper droughts. Rising sea level will threaten the Delta water conveyance system and increase salinity in near-coastal groundwater supplies. Planning for and adapting to these simultaneous changes, particularly their impacts on public safety and long-term water supply reliability, will be among the most significant challenges facing water and flood managers this century.
Forests and Landscapes	Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, wildfire occurrence statewide could increase from 57 percent to 169 percent by 2085. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state.

Source: CNRA, 2009

3.3.2 REGULATORY FRAMEWORK

FEDERAL REGULATION AND THE CLEAN AIR ACT

In the past, the U.S. Environmental Protection Agency (USEPA) has not regulated GHGs under the Clean Air Act (CAA) because it asserted that the act did not authorize the USEPA to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. However, the U.S. Supreme Court held that the USEPA must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency et al.*, 12 states and cities, including California, together with several environmental organizations, sued to require the USEPA to regulate GHGs as pollutants under the Clean Air Act (127 S. Ct. 1438 [2007]). The court ruled that GHGs fit within the Clean Air Act's definition of a pollutant and that the USEPA did not have a valid rationale for not regulating GHGs. In response to this ruling, the USEPA has recently made an endangerment finding that GHGs pose a threat to the public health and welfare. This is the first step necessary for the establishment of federal GHG regulations under the Clean Air Act.

In April 2010, the USEPA issued the final rule on new standards for GHG emissions and fuel economy for light-duty vehicles in model years 2017–2025. In November 2010, the USEPA published the "Prevention of Significant Deterioration (PSD) and Title V Permitting Guidance for

Greenhouse Gases," which provides the basic information that permit writers and applicants need to address GHG emissions regulated under the Clean Air Act. In that document, the USEPA described the "Tailoring Rule" in the regulation of GHG emissions. With the Tailoring Rule, the USEPA established a phased schedule in the regulation of stationary sources. The first phase of the Tailoring Rule began January 2, 2011, and focuses the GHG permitting programs on the largest sources with the most Clean Air Act-permitting experience. In phase two, which began June 1, 2011, the rule expands to cover large sources of GHGs that may not have been previously covered by the Clean Air Act for other pollutants. The rule also describes the USEPA's commitment to future rulemaking that will describe subsequent steps of the Tailoring Rule for GHG permitting (USEPA 2010d).

FEDERAL HEAVY-DUTY NATIONAL PROGRAM

In August 2011, the USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced the first-ever program to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses. The USEPA and the NHTSA have each adopted complementary standards under their respective authorities covering model years 2014–2018, which together form a comprehensive Heavy-Duty National Program. The goal of the joint rulemakings is to present coordinated federal standards that help manufacturers build a single fleet of vehicles and engines that are able to comply with both agencies. The USEPA and NHTSA have adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main regulatory categories: (1) combination tractors; (2) heavy-duty pickup trucks and vans; and (3) vocational vehicles. The USEPA has additionally adopted standards to control HFC leakage from air conditioning systems in pickups and vans and combination tractors. Also exclusive to the USEPA program are the USEPA's N_2O and CH_4 standards that will apply to all heavy-duty engines, pickups, and vans. For purposes of this program, the heavy-duty fleet incorporates all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds, and the engines that power them, except those covered by the current GHG emissions and Corporate Average Fuel Economy standards for model year 2012–2016 passenger vehicles.

The Heavy-Duty National Program is projected to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, from semi-trucks to the largest pickup trucks and vans, as well as all types and sizes of work trucks and buses in between. Vehicles covered by this program make up the transportation segment's second largest contributor to oil consumption and GHG emissions. This comprehensive program is designed to address the urgent and closely intertwined challenges of dependence on oil, energy security, and global climate change. The USEPA and the NHTSA estimate that the combined standards will reduce CO_2 emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of vehicles built for the 2014 to 2018 model years, providing $49 billion in net program benefits. A second phase of regulations is planned for model years beyond 2018. The goals would include spurring innovation as well as updating the assessment of actual emissions and fuel use from this sector. Such future regulation would also be designed to align with similar programs developed outside the U.S.

STATE

Assembly Bill 1493

Assembly Bill (AB) 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the California Air Resources Board (CARB) to develop and adopt the nation's first GHG emission standards, also known as Pavley 1, for automobiles. The California legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a

reduction in the state's water supply, an increase in air pollution caused by higher temperatures, harm to agriculture, an increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the state of California submitted a request for a waiver from federal clean air regulations, as the state is authorized to do under the CAA, to allow the state to require reduced tailpipe emissions of CO_2. In late 2007, the USEPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the state brought suit against the USEPA related to this denial.

In January 2009, President Obama instructed the USEPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the USEPA granted California's waiver request, enabling the state to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

Also in 2009, President Obama announced a national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the U.S. The new standards would cover model years 2012 to 2016 and would raise passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon (mpg) by 2016. When the national program takes effect, California has committed to allowing automakers showing compliance with the national program to also be deemed in compliance with state requirements. California is committed to further strengthening these standards requiring a 45 percent GHG reduction from the 2020 model year vehicles.

Executive Order S-3-05

Executive Order S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multiagency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases regulated by AB 32 include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs),

nitrogen trifluoride, and sulfur hexafluoride (SF_6). The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. CARB is implementing this program. The CARB board adopted a draft resolution for formal cap-and-trade rulemaking on December 16, 2010, and is developing offset protocols and compliance requirements. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Climate Change Scoping Plan

In October 2008, CARB published its Climate Change Proposed Scoping Plan, which is the state's plan to achieve GHG reductions in California as required by AB 32. The scoping plan contains the main strategies California will implement to achieve reduction of 169 million metric tons (MMT) of CO_2e, or approximately 30 percent from the state's projected 2020 emission level of 596 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent, from 2002–2004 average emissions). The scoping plan also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations are from improving emission standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e), implementation of the Low-Carbon Fuel Standard (15.0 MMT CO_2e), energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and a renewable portfolio standard for electricity production (21.3 MMT CO_2e). The scoping plan identifies the local equivalent of AB 32 targets as a 15 percent reduction below baseline GHG emissions level, with baseline interpreted as GHG emissions levels between 2003 and 2008. The scoping plan states that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. (Meanwhile, CARB is also developing an additional protocol for community emissions.) CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions resulting from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The proposed scoping plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the scoping plan expects approximately 5.0 MMT CO_2e will be achieved associated with implementation of Senate Bill (SB) 375, discussed further below. The Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.

The status of the scoping plan had been uncertain as a result of a court decision in the case of *Association of Irritated Residents v. California Air Resources Board* (San Francisco Superior Court Case No. CPF-09-509562). The court found that CARB, in its CEQA review, had not adequately explained why it selected a scoping plan that included a cap-and-trade program rather than an alternative plan. While CARB disagrees with the trial court finding and has appealed the

decision, in order to remove any doubt about the matter and in keeping with CARB's interest in public participation and informed decision making, CARB revisited the alternatives. The revised analysis includes the five alternatives included in the original environmental analysis: a "no project" alternative (that is, taking no action at all); a plan relying on a cap-and-trade program for the sectors included in a cap; a plan relying more on source-specific regulatory requirements with no cap-and-trade component; a plan relying on a carbon fee or tax; and a plan relying on a variety of proposed strategies and measures. The revised analysis relies on emissions projections updated in light of current economic forecasts, accounting for the economic downturn since 2008 and reduction measures already approved and put in place.

The public hearing to consider approval of the AB 32 Scoping Plan Functional Equivalent Document (including the Supplement) and the AB 32 Scoping Plan was held on August 24, 2011. On this date, the Scoping Plan was re-approved by the CARB.

Senate Bill 1368

SB 1368 (codified at Public Utilities Code Chapter 3) is the companion bill of AB 32. SB 1368 required the California Public Utilities Commission (CPUC) to establish a GHG emission performance standard for baseload generation from investor-owned utilities by February 1, 2007. The bill also required the California Energy Commission (CEC) to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural-gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and CEC.

Senate Bill 1078, Governor's Order S-14-08, and Senate Bill 2X (California Renewables Portfolio Standards)

SB 1078 (Public Utilities Code Sections 387, 390.1, 399.25 and Article 16) addresses electricity supply and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide a minimum 20 percent of their supply from renewable sources by 2017. The proposed project would receive energy service from the investor-owned Pacific Gas and Electric Company. This SB will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order S-14-08, which set the Renewable Portfolio Standard target to 33 percent by 2020. It directed state government agencies and retail sellers of electricity to take all appropriate actions to implement this target.

Prior to the Executive Order, the California Public Utilities Commission and the California Energy Commission were responsible for implementing and overseeing the Renewables Portfolio Standards. The Executive Order shifted that responsibility to the CARB, requiring them to adopt regulations by July 31, 2010. CARB is required by current law, AB 32 of 2006, to regulate sources of GHGs to meet a state goal of reducing GHG emissions to 1990 levels by 2020 and an 80 percent reduction of 1990 levels by 2050.

In March 2011, SB 2X established S-14-08 as law passed the state's legislature. While SB 2X contains the same targets as Governor's Order S-14-08 (33 percent of their supply from renewable sources by 2020), as an executive order it did not have the force of law (Governor's Order can be reversed by future governors).

Senate Bill 375

SB 375 (codified at Government Code and Public Resources Code[1]), signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy or Alternative Planning Strategy, which will prescribe land use allocation in that MPO's Regional Transportation Plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's Sustainable Communities Strategy or Alternative Planning Strategy for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

LOCAL

South Coast Air Quality Management District (SCAQMD)

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to the SCAQMD staff on developing the significance thresholds. On October 8, 2008, SCAQMD released the *Draft AQMD Staff CEQA GHG Significance Threshold*. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 considered use of the 6.6 metric tons per service population metric as a threshold for plan-level analysis, though it has not adopted any thresholds for the land use sector to date. Thus this is only a concept that has been discussed at the staff level and is not a SCAQMD recommendation at this time. Furthermore, SCAQMD's staff concept (as indicated in the September 28, 2010 working group presentation) is that the service population metric is only employed for significance determination after considering whether a CEQA plan or project is consistent with a climate action plan.

[1] Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01 as well as Public Resources Code Sections 21061.3, 21159.28, and Chapter 4.2.

As of SCAQMD staff's September 28, 2010 meeting, the draft tiered threshold provides the following guidance:

- **Tier 1:** Is the project exempt from CEQA? If yes, the project is not significant and no further analysis is required.
- **Tier 2:** Is the project consistent with an approved regional climate action plan? If yes, the project is not significant and no further analysis is required.
- **Tier 3:** Would the project result in emissions below the screening level criteria? If yes, the project is not significant and no further analysis is required.
  - Propose 3,000 MT/year CO2e for all land use types.
  - Threshold value by land use type acceptable if used consistently.
  - Residential: 3,500 MT/year CO2e
  - Commercial: 1,400 MT/year CO2e
  - Mixed use: 3,000 MT/year CO2e
  - Both options based on review of the Office of Planning and Research database (711 CEQA projects) using the 90% capture rate approach.
- **Tier 4:** Would the project comply with certain performance-based standards? If yes, the project is not significant and no further analysis is required.
  - **Option #1: Percent Emission Reduction Target**
    - No recommendation at this time
  - **Option #2: Early Implementation of Applicable AB 32 Scoping Plan Measures**
    - Incorporated in Option #3
  - **Option #3: SCAQMD Efficiency Target**
    - 2020 Targets
    - 4.8 MT/year CO2e per SP* for project level threshold (land use employment only)
    - 6.6 MT/year CO2e per SP for plan level threshold
    - 2035 Targets
    - 3.0 MT/year CO2e per SP* for project level threshold
    - 4.1 MT/year CO2e per SP* for plan level threshold

- **Tier 5:** Would the project secure sufficient carbon offsets or credits, offset alone or in combination with above tiers to achieve target significance threshold? If yes, the project is not significant and no further analysis is required.
  - 30-year project life
  - Real, quantifiable, verifiable, and surplus
  - Project design feature/on-site reduction measures
  - Off-site within neighborhood
  - Off-site within district
  - Off-site within state
  - Off-site out of state
  - Substitution allowed via enforceable commitment

The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

3.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Per Appendix G of the CEQA Guidelines, the County considers impacts related to climate change significant if implementation of the proposed project would result in any of the following:

1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

To meet GHG emission targets of AB 32, described above, California would need to generate fewer GHG emissions in the future than current levels. It is recognized, however, that for most projects there is no simple metric available to determine if a single project would substantially increase or decrease overall GHG emission levels or conflict with the goals of AB 32. Moreover, emitting CO_2 into the atmosphere is not itself an adverse environmental effect. It is the increased concentration of GHG emissions in the atmosphere resulting in global climate change and the associated consequences of climate change that results in adverse environmental effects (e.g., sea level rise, loss of snowpack, severe weather events). Although it is possible to generally estimate a project's incremental contribution of GHGs into the atmosphere, it is typically not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Given the complex interactions between various global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems that result in the physical expressions of global climate change, it

is impossible to discern whether the presence or absence of GHGs emitted as a result of the proposed General Plan would result in any altered conditions.

However, the state of California has established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California that should be addressed under CEQA. Although AB 32 did not amend CEQA, it identifies the myriad environmental problems in California caused by global warming (Health and Safety Code, Section 38501[a]). In response to the relative lack of guidance on addressing GHGs and climate change, SB 97 was passed in order to amend CEQA by directing the Office of Planning and Research to prepare revisions to the State CEQA Guidelines addressing the mitigation of GHGs or their consequences. These revisions to the State CEQA Guidelines went into effect in January 2010.

Thresholds of significance illustrate the extent of an impact and are a basis from which to apply mitigation measures. As previously stated, the SCAQMD has not announced when staff is expecting to present a finalized version of GHG thresholds to the governing board. On September 28, 2010, the SCAQMD recommended a general plan threshold of 6.6 metric tons of CO_2 equivalent (CO_2e) per service population (residents plus employees) per year in 2020 and 4.1 metric tons of CO_2e per service population per year in 2035.

Therefore, for the purposes of this evaluation and in the absence of any adopted significance thresholds, a threshold of 6.6 metric tons of CO_2e per service population per year in 2020 and 4.1 metric tons of CO_2e per service population per year in 2035 is used to assess the significance of GHGs. This analysis approach for the Eastvale General Plan is deemed acceptable by SCAQMD (SCAQMD, 2011).

METHODOLOGY

The resultant GHG emissions of Eastvale's projected build-out were calculated using the California Emissions Estimator Model (CalEEMod), version 2011.1.1, computer program (see Appendix 3.3-1). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for the use of government agencies, land use planners, and environmental professionals. This model was developed in coordination with SCAQMD and is the most current emissions model approved for use in the state of California by various other air districts.

The following proposed General Plan policies address impacts related to the city's contribution to GHGs:

Policy LU-9: *The City will participate in regional efforts to address issues of mobility, transportation, traffic congestion, economic development, air and water quality, and watershed and habitat management with cities, local and regional agencies, stakeholders, and surrounding jurisdictions.*

Policy LU-11: *Development should be located to capitalize on multimodal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile.*

Policy LU-12: *The Land Use Map should provide for land use patterns which reduce the number and length of motor vehicle trips.*

Policy LU-16: *The City will allow mixed-use projects to develop in commercially designated areas in accordance with the guidelines of the Town Center land use designation and with special consideration of impacts to adjacent uses.*

Policy LU-24: *The City supports the placement of community-oriented facilities, such as telecommuting centers, public meeting rooms, day care facilities, and cultural uses, in Eastvale in locations compatible with surrounding uses and consistent with the goals and policies of this General Plan.*

Policy LU-28: *The Land Use Map should provide for land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use in order to minimize congestion and air pollution.*

Policy LU-29: *Employment and service uses should be located in areas that are easily accessible to existing or planned transportation facilities.*

Policy LU-30: *Commercial uses should be located near transportation facilities and include facilities to promote the use of public transit (such as bus turnouts, bus shelters, etc.).*

Policy C-6: *Support the Riverside County Transportation Commission (RCTC) on the development of the Short- and Long-Range Transit Plans.*

Policy C-8: *Encourage the installation and use of HOV lanes on regional roadways and consider the use of HOV lanes when any widening project is undertaken on urban arterials.*

Policy C-11: *Alternative levels of service may be allowed on intersections in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, and alternative transportation and comfortable walking distance to goods and services.*

Policy C-11: *Alternative levels of service may be allowed on intersections in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, and alternative transportation and comfortable walking distance to goods and services.*

Policy C-15: *Following the principles of complete streets, maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Ensure that the entire travel way is included in the design from building façade to building façade.*

Policy C-16: *Pedestrian access shall be provided from developments to existing and future transit routes, park and ride lots, terminal facilities, etc.*

Policy C-17: *All development located along planned trails shall provide access to the trails system. All developments shall allow for trails to pass their boundaries and shall provide connections to existing and proposed trails in Eastvale and adjacent jurisdictions.*

Policy C-18: *Collaborate with schools to ensure that school children have safe and adequate transportation routes available, such as a pedestrian or bike paths, or a local bus service.*

Policy C-19: *Require, where feasible, the construction of overpasses or undercrossings where trails intersect urban arterials or freeways.*

Policy C-20: *Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted.*

Policy C-21: *Coordinate with Caltrans, the Riverside County Transportation Commission, transit agencies, and other responsible agencies to identify the need for additional park-and-ride facilities along major commuter travel corridors and at major activity centers.*

Policy C-25: *Incorporate the potential for public transit service in the design of developments that are identified as major trip attractions (i.e., retail and employment centers).*

Policy C-26: *Design the physical layout of urban arterials, major and secondary highways, and collectors to facilitate bus operations, including turnouts and shelters.*

Policy AQ-4: *Attain performance goals and/or vehicle miles traveled reductions consistent with SCAG's Growth Management Plan.*

Policy AQ-10: *The City encourages new cooperative relationships between employers and employees to reduce vehicle miles traveled.*

Policy AQ-11: *The City encourages large employers and commercial/industrial complexes to create Transportation Management Associations.*

Policy AQ-12: *The City encourages employee rideshare and transit incentives for employers with more than 25 employees at a single location.*

Policy AQ-18: *Support local, regional, and statewide efforts to reduce emissions of greenhouse gases linked to climate change.*

Implementation Item AQ-18.1: As funding permits the City will prepare a greenhouse gas inventory and a climate action plan designed to reduce greenhouse gasses. The City may also participate in a regional climate action plan prepared by others. Until a climate action plan is adopted each project shall evaluate its impact on greenhouse gasses as part of the environmental process.

Policy AQ-19: *Analyze and mitigate potentially significant increases in greenhouse gas emissions during project review, pursuant to the California Environmental Quality Act.*

Policy AQ-20: *Continue to support the planting and maintenance of trees in the community to increase carbon sequestration.*

Policy AQ-26: *Permit and encourage the use of passive solar devices and other state-of-the-art energy resources.*

Policy AQ-29: *Undertake proper maintenance of City physical facilities to ensure that optimum energy conservation is achieved.*

Policy AQ-30: *Promote coordination of new public facilities with mass transit service and other alternative transportation services, including bicycles, and design structures to promote mass transit, bicycle, and pedestrian use.*

Policy AQ-31: *The City encourages urban design measures that support alternatives to private automobile use.*

Policy AQ-32: *Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.*

Policy AQ-33: *The City encourages the incorporation of energy-efficient design elements beyond code requirements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.*

Policy AQ-34: *The City shall review all development proposals to ensure that all services and utilities can be provided in an efficient and effective manner.*

Policy AQ-35: *The City shall promote energy-efficient retrofit improvements in existing buildings.*

Policy AQ-36: *The City shall support the inclusion of energy-efficient design and renewable energy technologies in public and private projects.*

The impact analysis provided below utilizes these proposed policies to determine whether implementation of the proposed General Plan would result in significant impacts. The analyses identify and describe how specific policies provide enforceable requirements and/or performance standards that address climate change and avoid or minimize significant impacts.

IMPACTS AND MITIGATION MEASURES

Generate Greenhouse Gas Emissions that May Have a Significant Impact on the Environment (Standard of Significance 1)

Impact 3.5.1 Implementation of the proposed General Plan will result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This is considered a **cumulatively considerable** impact.

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

Construction GHG Emissions

Subsequent development proposed under the General Plan would result in direct emissions of GHGs from construction. As noted in Section 3.3, Air Quality, the quantification of emissions resulting from future construction activities in Eastvale under the proposed General Plan is not possible due to project-level variability and uncertainties related to future individual projects. However, all construction projects can produce GHG emissions and all future development projects under the proposed General Plan would be subject to SCAQMD rules and regulations in effect at the time of construction, as stipulated by proposed Policy AQ-19, which requires the analysis and mitigation of GHG emissions during development project review, pursuant to CEQA. SCAQMD recommends GHG quantification of all development proposals and, as stated above, SCAQMD provides tiered GHG significance threshold guidance. The SCAQMD Tier 3 recommends a significance threshold for all new development types and recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

While adherence to SCAQMD recommended GHG thresholds would not offset GHG emissions resulting from construction activities, projected growth under the proposed Eastvale General Plan would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR, as the proposed City of Eastvale General Plan retains the existing land use designations in the current Riverside County General Plan and would not include changes to the existing Land Use Map.

Operational GHG Emissions

Future growth in the City of Eastvale is guided by the land uses identified in the proposed General Plan Land Use Map and the proposed General Plan retains and would not change the existing land use designations in the current Riverside County General Plan. While implementation of the proposed Eastvale General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development, such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR.

Table 3.5-4 summarizes the emissions associated with both existing conditions and build-out conditions in Eastvale.

TABLE 3.5-4
GREENHOUSE GAS EMISSIONS (BUILD-OUT) – METRIC TONS PER YEAR

Source	CO_2	CH_4	N_20	CO_2e
Eastvale Existing 2012 Conditions (Annual) – Metric Tons per Year[1]				
Area	10,773	5.1	0.2	10,946
Energy	105,794	3.9	1.9	106,451
Mobile	292,687	16.5	0.0	293,034
Solid Waste	23,421	1,384	0.0	52,487
Water	152,636	1,202	32.2	187,871
Total	**585,310**	**2,612**	**34**	**650,790**

Source	CO_2	CH_4	N_20	CO_2e
Eastvale Build-out Conditions (Annual) – Metric Tons per Year[2]				
Area	13,174	6.2	0.3	13,384
Energy	144,638	5.4	2.5	145,537
Mobile	384,643	13.8	0.0	384,933
Solid Waste	35,854	2,119	0.0	80,351
Water	240,095	1,896	50	295,667
Total	**818,404**	**4,040**	**54**	**919,872**
Net Difference (Build-out Conditions – 2012 Existing Conditions)				
Net Difference	**233,094**	**1,428**	**20**	**269,082**

Source: CalEEMod 2011 (see Appendix 3.3-1).
[1] Existing residential units sourced from the proposed General Plan. Existing nonresidential square footage derived from Willdan 2009.
[2] Build-out conditions based upon Table 3.0-1 of this Draft EIR.

As shown in **Table 3.5-4**, under existing conditions (2012), the City of Eastvale generates 650,790 metric tons of CO_2e annually. With build-out of Eastvale, GHG emissions are calculated to grow to 919,872 metric tons per year.

As noted in the Standards of Significance discussion above, SCAQMD's GHG emission threshold is 6.6 metric tons of CO_2e per service population (residents plus employees) per year by the year 2020 and 4.1 metric tons of CO_2e per service population (residents plus employees) per year by the year 2035. SCAQMD's approach is to identify the emissions level for which a plan would not be expected to substantially conflict with existing California legislation (AB 32) adopted to reduce statewide GHG emissions. Based on the population and employment figures the 2012 service population was 59,307 and the build-out service population is anticipated to be 68,671. Dividing the GHG emissions for each time period yields a metric ton per service population ratio of 9.4 and 13.4 for existing conditions and build-out conditions, respectively. Both ratios are greater than the 6.6 metric tons per service population threshold and would result in a net increase in GHG emissions.

TABLE 3.5-5
EASTVALE BUILD-OUT GHG EMISSIONS PER SERVICE POPULATION

Per Capita Emissions	Emissions	Jobs	Population	Service Population (SP)	MTCO2e/SP/ Year
Eastvale Existing (2012) Conditions	650,790	5,639	53,668	59,307	9.4
Eastvale Build-out	919,872	6,973	61,698	68,671	13.4

As shown in **Table 3.5-4**, the majority of estimated GHG emissions generated at city build-out result from mobile emissions sources. The proposed General Plan seeks to reduce the environmental impact (including GHG emissions) of land use development by increasing the viability of walking, biking, and transit by allowing mixed-use projects which provide land use arrangements that reduce reliance on the automobile, and thus reduce GHG emissions, and improve opportunities for pedestrian, bicycle, and transit use. For example, proposed Policy LU-14 would allow mixed-use projects to develop in commercially designated areas in accordance

with the guidelines of the Community Center Land Use Designation; and Policy LU-29 states that commercial uses should be located near transportation facilities and include facilities to promote the use of public transit (such as bus turnouts, bus shelters, etc.). Also, Policy C-11 would allow an alternative Level of Service (lower than level of service C) in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, alternative transportation and comfortable walking distance to goods and services in order to promote compact development; and Policy C-25 would require the incorporation of public transit service in the design of developments identified as major trip attractions (i.e., retail and employment centers).

The intent of proposed General Plan policies is to accommodate anticipated growth in a compact urban form, including mixed-use development, as well as focusing development along transit corridors and at other key locations. Furthermore, the proposed General Plan would not include changes to the existing County of Riverside Land Use Map. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed Eastvale General Plan.
However, GHG calculations predict emissions in excess of the SCAQMD threshold and would result in a net increase in GHG emissions. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

Conflict with Applicable Greenhouse Gas Reduction Plan (Standard of Significance 2)

Impact 3.5.2 Implementation of the proposed General Plan would not be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.) as interim SCAQMD thresholds would be surpassed. This is considered a **cumulatively considerable** impact.

The core mandate of AB 32 is that statewide GHG emissions in 2020 equal 1990 levels. AB 32 is anticipated to secure emission reductions through a variety of mechanisms, such as increasing energy efficiency and introducing more renewable energy sources. CARB has already begun to adopt strategies to reduce GHG emissions under AB 32. Strategies included in the Climate Change Scoping Plan, described in detail above, such as the California Light-Duty Vehicle GHG Standard, Renewable Portfolio Standard, and Low Carbon Fuel Standard, while applicable to land use projects, are generally not under the control of local agencies like the City of Eastvale. Nonetheless, emission reductions from these strategies are anticipated to occur as CARB adopts and implements regulations under AB 32. Reductions are already expected to take place in 2012 due to the newly adopted vehicle emission standards and the Low Carbon Fuel Standard.

It is the intent of AB 32 to reduce statewide GHG emissions by 15 percent below 2005 levels by 2020, which is equivalent to the goals of AB 32. As noted under Impact 3.5.1, build-out of the City of Eastvale would result in a net increase in cumulative GHG emissions. According to the proposed General Plan, two important steps in helping to reduce climate change impacts are the creation of an inventory of existing GHGs and a plan to reduce these emissions. A Climate Action Plan (CAP) is a guiding document to identify ways in which a city, county, or community can reduce GHG emissions and adapt to the inevitable effects of climate change. A common goal for a CAP is a 15 percent reduction below 2005 levels by 2020 in order to comply with AB 32. A CAP outlines transportation, land use, energy use, and waste production measures to achieve its target and proposes a timeline for implementation. CAPs are becoming increasingly popular as a way to spread awareness of climate change, reduce an area's impact on the environment, and save money on energy bills. Additionally, when referenced in general plans and environmental documents, CAPs signify a public agency's efforts to combat climate change. Compliance with local GHG reduction measures in new development is critical to ensuring the City's ability to meet GHG reduction goals consistent with state and regional goals.

However, these eventual requirements and their resulting effects on future GHG impacts cannot be known with any certainty as the City has not yet developed a CAP. Therefore the following mitigation is required.

Mitigation Measures

MM 3.5.2 Add the following Implementation Item to the Air Quality and Conservation Chapter of the General Plan:

"Implementation Item AQ-18.1: As funding permits the City will prepare a greenhouse gas inventory and climate action plan designed to reduce greenhouse gasses. The City may also participate in a regional climate action plan prepared by other. Until a climate action plan is adopted each project shall evaluate its impact on greenhouse gasses as part of the environmental process."

Mitigation measure **MM 3.5.2** requires the City to prepare a GHG inventory and CAP; however, embarking on this process, while mandated by this mitigation, will require additional funding that is not available at this time. While implementation of an upcoming CAP could potentially mitigate GHG emissions projected for build-out conditions consistent with the reduction goal of AB 32, the proposed General Plan has acknowledged that embarking on the process of CAP development is unable to occur at this time. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

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3.6 PUBLIC SERVICES

This section of the Draft EIR describes the public services that would serve the City of Eastvale at build-out of the proposed General Plan. Specifically, this section includes an examination of fire protection, law enforcement services, and parks and recreation. Each subsection includes a description of existing facilities and infrastructure, applicable service goals, potential environmental impacts resulting from implementation of the proposed General Plan, and cumulative impacts.

3.6.1 FIRE PROTECTION

3.6.1.1 EXISTING CONDITIONS

RIVERSIDE COUNTY FIRE DEPARTMENT

The Riverside County Fire Department (RCFD) is one of the largest regional fire service organizations in California. It is staffed with a combination of County of Riverside and State of California Department of Forestry and Fire Protection (CAL FIRE) personnel, and responds to both urban and wildland emergencies. RCFD serves diverse communities and a vast geographic area. RCFD, a unique partnership between CAL FIRE and the County of Riverside, serves 19 partner agencies and maintains a roster of approximately 700 volunteers.

The RCFD Northwest Division, via Station 27, provides fire protection services to the City of Eastvale. The Northwest Division encompasses the northern corner of Riverside County from the Orange County line on the west to the western edge of the City of Riverside on the east. The Northwest Division contains the Norco Conservation Camp and has three battalions containing 19 permanently staffed fire stations and two volunteer stations. Station 27 is located at 6709 Cedar Creek in Eastvale.

The Northwest Division services include fire suppression, emergency medical service, rescue service, hazardous material emergencies service, public assists (post-fire/accident cleanup, water removal, flooding assistance, assistance to the Police Department), fire prevention and life safety, and emergency preparedness.

Personnel and Facilities

The County of Riverside supplements its staff of 175 employees by contracting with the California Department of Forestry and Fire Protection (CAL FIRE) to provide fire protection services with an additional 1,077 employees. The department operates 93 fire stations in six divisions comprised of 17 line battalions, providing fire suppression, emergency medical, technical rescue, fire prevention and related services. The equipment used by the department has the versatility to respond to both urban and wildland emergencies (RCFD 2009, p. 7).

The RCFD has approximately 55 volunteer fire companies with a roster of approximately 700 volunteer firefighters who serve Riverside County, including numerous contract cities (RCFD 2009, p. 9). Volunteers respond with career firefighters to wildland fires, structure and vehicle fires, medical emergencies, traffic collisions, hazardous materials, floods and other emergencies. Volunteer fire companies respond on RCFD fire engines, water tenders and breathing support units. Additionally, the volunteer fire companies own and operate 22 squad vehicles, which are purchased and maintained with community donations and grants (RCFD 2009, p. 9). Many of these squads carry specialized equipment, including Jaws of Life and other firefighting and rescue tools (RCFD 2009, p. 9). RCFD also utilizes volunteer support teams to provide additional staffing and services at the Ben Clark Training Center, Indio and Riverside Emergency Operations

Centers (EOCs), Perris Emergency Command Center (ECC), and the Mobile Emergency Operations Center (MEOC) command post vehicle (RCFD 2009, p. 9).

Incident Calls

RCFD responded to over 114,000 calls for service during the 2007 calendar year (RCFD 2009, p. 7). RCFD serves approximately 1.3 million residents in an area of 7,004 square miles (RCFD 2009, p. 7). This service area consists of the unincorporated county areas, 18 contract cities and one contract Community Services District. In addition, RCFD provides dispatch services for four contract agencies, including the City of Eastvale.

On average, total calls for service increased by 2 percent per year during the years between 2004 and 2007 (RCFD 2009, p. 34).

Automatic and Mutual Aid

Fire protection mutual aid is defined as an agreement between two fire agencies in which they commit to respond to calls for services in the other agency's jurisdiction when they are called, at no cost to the requesting agency. Automatic aid is not only predetermined, but one or more additional departments are automatically dispatched to certain locations or types of alarms at the same time as the home department. Typically, both mutual and automatic aid agreements are written between the agencies. The RCFD has four mutual aid and seven automatic aid agreements with other agencies.

Response Times and Service Standards

RCFD's current standard for average response time is seven minutes throughout urbanized areas. In addition, RCFD standards hold that urban development should be located no more than three miles from a county fire station.

The RCFD operates under a Regional Fire Protection Program, which allows its fire stations to actively support one another regardless of geographic or jurisdictional boundaries. This provides the community with the most effective and efficient method of emergency response, and allows for the shared use of specialized equipment and personnel between neighboring communities.

ISO Rating

The Insurance Services Office (ISO) is an independent organization that serves insurance companies, fire departments, insurance regulators, and others by providing information about risk. ISO's Public Protection Classification (PPC) service gauges the quality of local fire departments by collecting information on a community's public fire protection and then analyzing the data using a Fire Suppression Rating Schedule (FSRS). ISO then assigns a PPC from 1 to 10. Class 1 represents the best public protection and Class 10 indicates no recognized protection. A community's PPC depends on the following criteria (ISO 2009):

- Fire alarm and communications systems, including telephone systems, telephone lines, staffing, and dispatching systems;
- The fire department, including equipment, staffing, training, and geographic distribution of fire companies; and

- The water supply system, including condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

Departments are normally rated about every 10 years. In 2001, the ISO re-grade became effective for the unincorporated areas of Riverside County and contract cities served by the RCFD. The RCFD currently has an ISO PPC rating of 4.

3.6.1.2 REGULATORY FRAMEWORK

STATE

California Fire Code

The 2010 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the state of California (CBSC 2008). The Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

California Health and Safety Code

Additional state fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which include regulations for building standards, fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building and child care facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with the California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Fighting Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose-sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

LOCAL

Strategic Plan

RCFD's Strategic Plan describes the array of fire and rescue services provided to the citizens, and defines current and future needs and recommends goals and objectives that, when implemented, will enable the department to meet those needs during the next 20 years.

3.6.1.3 IMPACTS AND MITIGATION MEASURES

STANDARD OF SIGNIFICANCE

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. A fire protection impact is considered significant if implementation of the project would:

1) Create substantial adverse physical impacts associated with the provision of new or physically altered fire related facilities or services, the construction and/or provision of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.

METHODOLOGY

Evaluation of potential fire protection service impacts was based on a review of the applicable fire codes and regulations and other relevant literature. This material was then compared to the proposed General Plan's specific fire service-related impacts. The analysis takes into account the density and type of existing and proposed land uses within Eastvale.

The following proposed General Plan policies address fire protection service:

Policy S-10: *All proposed construction shall meet minimum standards for fire safety as defined in the City's Building or Fire Codes, based on building type, design, occupancy, and use.*

Policy S-11: *Development in Hazardous Fire areas shall include secondary public access, unless determined otherwise by the Fire Chief.*

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Fire Protection Services (Standard of Significance 1)

Impact 3.6.1.1 Implementation of the proposed General Plan could result in the need for additional fire protection services facilities in order to maintain acceptable service ratios and response times. The provision of these facilities could cause environmental impacts. However, future fire protection/emergency medical services facilities would be subject to project-level CEQA review at such time as an application for a project was submitted to the appropriate agency. Therefore, this is a **less than significant** impact.

The Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant impacts to fire protection services. The proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan.

RCFD has a goal of seven minutes for an average response time throughout urbanized areas such as Eastvale. In addition, RCFD standards hold that urban development should be located no more than three miles from a County fire station. RCFD Station 27 is strategically located in

central Eastvale at 6709 Cedar Creek Road, which is within three miles of any location in the city. Furthermore, the RCFD operates under a Regional Fire Protection Program, which allows its fire stations to actively support one another regardless of geographic boundaries. This provides the community with the most effective and efficient method of emergency response, and allows for the shared use of specialized equipment and personnel between neighboring communities.

In the fiscal year 2009/10 budget, the County approved the construction of a fire station on Hamner Avenue in the city which has since been built and is currently operating. In addition, RCFD anticipates the construction of another fire station in western Eastvale though a specific location has not been identified at the time of this DEIR. The provision of this additional facility is proposed separately from the proposed General Plan and will be required to undergo project-specific environmental review at such time as an application for the project was submitted. The typical environmental effects regarding the construction and operation of a fire protection facility may involve issues with noise (sirens), air quality (during the construction of the facility), biological resources (depending on location), cultural resources (depending on location), public utilities (demand for electric, water, and wastewater service), and traffic on a local level due to the interruption of traffic light timing by fire engines. The environmental effects of construction of such facilities within Eastvale have been programmatically evaluated in the technical analyses of this Draft EIR as part of overall development of the city.

Impacts associated with fire protection would be reduced to a **less than significant** level.

3.6.1.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for fire protection services includes the service area boundaries of the RCFD and the surrounding areas that give and receive mutual aid with the RCFD (see **Table 3.6.1-1**). The cumulative setting includes all existing, planned, proposed, approved, and reasonably foreseeable development in the RCFD service area that currently places demand on fire protection services or is expected to place demand on services in the future. **Table 3.0-2** in Section 3.0 of this DEIR contains a list of regional development projects that would be included in the cumulative setting.

Cumulative Demand for Fire Protection Services (Standard of Significance 1)

Impact 3.6.1.2 Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in Riverside County, could increase the demand for fire protection services and thus require additional staffing, equipment, and related facilities under cumulative conditions. The provision of these facilities could result in environmental impacts. The project's contribution to the need for expanded fire protection services is considered **less than cumulatively considerable**.

Future regional growth would result in increased demand for fire protection services throughout Riverside County. This cumulative regional demand could result in increased requests for mutual aid from the RCFD, and growth in the city could result in increased requests for mutual aid from any of the jurisdictions identified in **Table 3.6.1-1**. However, it is not anticipated that increased mutual aid requests would result in the need for additional fire protection facilities because mutual aid would be provided via existing facilities, equipment, and personnel at the time of the mutual aid request. Furthermore, as discussed under Impact 3.6.1.1 above, the environmental

effects of the construction of a fire station in western Eastvale is proposed separately from the proposed General Plan and will be required to undergo project-specific environmental review at such time as an application for the project was submitted. In addition, future fire protection facilities projects would be subject to project-level CEQA review at such time as an application for a project was submitted to the appropriate agency.

Project-level CEQA review of future fire protection facilities would ensure that cumulative environmental impacts associated with the continued provision of fire protection response services would be considered **less than cumulatively considerable**.

3.6.2 LAW ENFORCEMENT SERVICES

3.6.2.1 EXISTING CONDITIONS

CITY OF EASTVALE POLICE DEPARTMENT

Police protection services are provided by the Riverside County Sheriff's Department (RCSD). The nearest sheriff's station is the Jurupa Valley Station, located at 7477 Mission Boulevard in Jurupa Valley. Patrol operations for Eastvale began with incorporation in 2010 with 21 sworn deputies from the Jurupa Valley Station. Basic police services under the contract are fulfilled by 18 patrol officers, who have received supplementary training in traffic collision and driving under the influence investigations (RCSD 2011).

The Jurupa Valley Station's Crime Analysis Unit handles a wide variety of analytical and technical tasks for Eastvale. These assignments include the collection of crime data, analysis of crime trends, with the ultimate goal of crime prevention through the piecing together of information about crimes, suspects, and victims. Crime analysis information is also shared with surrounding law enforcement agencies, the Joint Terrorism Task Force, special enforcement teams, and the Riverside County District Attorney's Office for use in major operations.

Calls for Service

One of the tools for determining appropriate staffing levels and resource utilization in law enforcement is calls for service statistics. The most important calls for service, termed "Priority 1," are related to in-progress, life-threatening incidents (RCSD 2011). "Priority 2" calls are slightly less severe in nature; "Priority 3" calls are more routine in nature; and "Priority 4" calls refer to past incidents that may be handled by telephone or a delayed response (RCSD 2011).

In 2010, deputies from the Jurupa Valley Station responded to 54,778 calls for service, 2,634 of them from Eastvale.

TABLE 3.6.2-1
EASTVALE CALLS FOR POLICE SERVICE

Response Rank	2010 Calls
Priority 1	46
Priority 2	1,088
Priority 3	796
Priority 4	704
Total	2,634

Source: RCSD, 2011
Response Times Total 2009 Calls

Service Standards

The Riverside Sheriff's Department has a goal of 1.5 sworn officers per 1,000 population.

Funding

The Eastvale contract with the Riverside Sheriff's Department is funded via the city's General Fund and various fees (administrative fees, police officer services fees, etc.).

3.6.2.2 REGULATORY FRAMEWORK

LOCAL

Existing General Plan

On October 1, 2010, the City of Eastvale was incorporated and the newly formed City Council adopted the Riverside County General Plan (2003) and County municipal code (2010) to function as the City of Eastvale General Plan and municipal code. The Riverside County General Plan contains supporting environmental studies, namely the Eastvale Area Plan, as well as extensive objectives, policies, and programs designed to identify and address the environmental impacts of development within Eastvale over the long term. The adopted Eastvale General Plan currently is used as the "blueprint" to guide future development within the city limits. The existing General Plan includes policies intended to address the effects of future residents on sheriff protection services. These policies ensure adequate sheriff protection as development occurs. The proposed General Plan would establish policies associated with police services. Specific proposed policies are discussed in the impact analyses below.

3.6.2.3 IMPACTS AND MITIGATION MEASURES

STANDARD OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A law enforcement services impact is considered significant if implementation of the proposed General Plan would:

1) Create substantial adverse physical impacts associated with the provision of 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 law enforcement services.

METHODOLOGY

Evaluation of potential law enforcement impacts was based on a review of the Riverside County Sheriff's Department Jurupa Valley Station 2010 Annual Report. The information in these reports is compared to growth anticipated in Eastvale. The impact analysis focuses on whether those impacts would have a significant effect on the physical environment.

The following proposed General Plan policies address law enforcement service:

Policy LU-30: *The City will work with other agencies to coordinate development with supporting infrastructure and services, such as water and sewer service, libraries, parks and recreational facilities, transportation systems, and fire/police/medical services.*

Policy S-21: *The City shall ensure the safety and protection of Eastvale and its community members by providing appropriate first response to emergencies and ensure that sufficient resources are available to expand protection as the community grows.*

Implementation S-21.1: The City will maintain and enhance community safety through coordinated regional emergency, law-enforcement and protective services systems.

Implementation S-21.2: The City will work with the Police Department through the review of proposed development projects to ensure that public safety issues are considered.

Policy S-22: *The City will seek to maintain and enhance communications between community residents and the police through regular meetings and a visible community policing program.*

Policy S-24: *The City encourages the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of private development projects and public facilities.*

These basic principles include:

Natural Surveillance

A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas, and building entrances: doors and windows that look out on to streets and parking areas; pedestrian-friendly sidewalks and streets; front porches; and adequate nighttime lighting.

Territorial Reinforcement

Physical design can create or extend the area in which users develop a sense of territorial control. Potential offenders, perceiving this control, are discouraged. This experience is promoted by features that define property lines and distinguish private spaces from public

spaces by using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.

Natural Access Control

A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating a perception of risk in the mind of the offender. This is gained by designing streets, sidewalks, building entrances, and neighborhood gateways to clearly indicate public routes and discouraging general access to private areas through structural and design elements.

Target Hardening

Target hardening is accomplished by features that prohibit entry or access (such as window locks, deadbolts for doors, and interior door hinges). Offenders will seek easier targets, reducing crime in areas where these features are used.

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Law Enforcement Services (Standard of Significance 1)

Impact 3.6.2.1 Implementation of the proposed General Plan would not result in increased demand for law enforcement services that would result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts. Therefore, this is a **less than significant** impact.

The Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant impacts to law enforcement services. The proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan.

The Riverside Sheriff's Department has a goal of 1.5 sworn officers per 1,000 population. Full build-out of the General Plan Land Use Map would result in an increase of 8,030 persons in the city compared with the current population, for a total population of 61,698. Therefore, in order to achieve the Riverside County Sheriff Department's goal of 1.5 sworn officers per 1,000 population, the Jurupa Valley Station would need 41 sworn officers at build-out of the Land Use Map. As previously stated, Eastvale is served by deputies of the Jurupa Valley Station and basic police services under the contract are fulfilled by 18 patrol officers. However, the Jurupa Valley Station comprises a total of 80 deputy sheriffs, a number of which could respond to any calls for service in Eastvale that demand service beyond the basic services. Therefore, no new or expanded law enforcement facilities would be needed to accommodate anticipated growth in Eastvale and this impact is **less than significant**.

3.6.2.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for law enforcement services includes the service area boundaries of the Jurupa Valley Sheriff's Station. The Jurupa Valley Sheriff's Station services within the Eastvale, Norco, Jurupa Valley, and the surrounding unincorporated areas. The cumulative analysis

includes all existing, planned, proposed, approved, and reasonably foreseeable development within the Planning Area.

Cumulative Demand for Law Enforcement Services (Standard of Significance 1)

Impact 3.6.2.2 Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Jurupa Valley Station service area, would increase the demand for law enforcement services and thus require additional staffing, equipment, and facilities, the construction of which could cause significant environmental impacts. The project's contribution to the need for expanded law enforcement services is considered **less than cumulatively considerable**.

Growth anticipated in association with the proposed General Plan would occur in Eastvale. As discussed in Impact 3.6.2.1 above, the proposed General Plan would not result in the need for additional law enforcement staffing, equipment, and facilities. Since the project would have less than significant impact on law enforcement services provided by the Jurupa Valley Sheriff's Station, it would not contribute significantly to cumulative impacts on these services. Therefore, this impact would be **less than cumulatively considerable**.

3.6.3 PARKS AND RECREATION

3.6.3.1 EXISTING CONDITIONS

Eastvale is home to numerous public parks, which are owned and operated by the Jurupa Community Services District (JCSD) and the Jurupa Area Recreation and Park District (JARPD), two independent agencies. JCSD owns and maintains public parks in the portion of Eastvale west of Hamner Avenue and JARPD provides public parks in the portion of Eastvale east of Hamner Avenue and in the neighboring City of Jurupa Valley.

PARKS AND RECREATION FACILITIES

The City of Eastvale currently includes a total of 16 parks and recreation areas, including Riverwalk Park, a 13-acre park adjacent to the Santa Ana River. A list of existing parks and the responsible agency are shown below in **Table 3.6.3-1**.

TABLE 3.6.3-1
PARK AND RECREATION FACILITIES

Park Name	Park Acreage	Park Jurisdiction	Park Location
Moon River Park	N/A	JARPD	6859 Moon River Street
Delaware Greenbelt	0.1	JARPD	6986 Delaware River Drive
Cambria Park	0.4	JARPD	5471 Harmony Drive
Harmony Park	0.6	JARPD	5641 Treasure Drive
Harada Heritage Park	40	JCSD	13100 65th Street
Deer Creek Park	10	JCSD	6785 Iron Horse Lane
Providence Ranch Park	13	JCSD	7250 Cobble Creek
Cedar Creek Park	1	JCSD	6709 Cedar Creek Road

Park Name	Park Acreage	Park Jurisdiction	Park Location
James C. Huber Park	12	JCSD	6411 Rolling Meadows
Orchard Park	10	JCSD	5900 Festival Way
Half Moon Park	5	JCSD	14383 Cherry Creek
Riverwalk Park	13	JCSD	7674 Soaring Bird Court
McCune Family Park	12	JCSD	7450 Eastvale Parkway
Mountain View Park	8	JCSD	14444 Selby Avenue
Dairyland Park	6	JCSD	14520 San Remo
Eastvale Jogging/Running/Bike Trail	1.5	JCSD	From Hamner Avenue to River Road, adjacent to the Santa Ana River
American Heroes Park	25	JCSD	6608 Hellman Avenue
Eastvale Community Park	45+	JCSD	Corner of Hamner and Citrus Avenues
Total Acreage	202.5+		

Source: PMC

PARKLAND STANDARDS

On October 1, 2010, the City of Eastvale was incorporated and the newly formed City Council adopted the Riverside County General Plan (2003) and County municipal code (2010) to function as the City of Eastvale General Plan and municipal code. The JCSD Parks Master Plan establishes the requirement of five acres of parkland per 1,000 population as does JARPD. (JCSD is currently updating their Parks Master Plan and the City anticipates adopting this updated plan once completed.)

The City of Eastvale is currently not meeting the level of service standard. As shown in **Table 3.6.3-1**, an additional 65.5 acres of parklands are needed to meet the standards. [2012 population of 53,668 = a standard of 268 acres (53.6 x 5.0 acres = 268)].

3.6.3.2 REGULATORY FRAMEWORK

STATE

Quimby Act

The goal of the 1975 Quimby Act (California Government Code Section 66477) was to require developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances only to cities and counties, thus requiring special districts to work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide parks and recreation services community-wide. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities (Westrup 2002).

Originally, the Quimby Act was designed to ensure "adequate" open space acreage in jurisdictions adopting Quimby Act standards (e.g., five acres per 1,000 residents). In some California communities the acreage fee was very high where property values were high, and

many local governments did not differentiate on their Quimby fees between infill projects and green belt developments. In 1982, the Quimby Act was substantially amended via Assembly Bill 1600. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. In other words, AB 1600 requires agencies to clearly show a reasonable relationship between the public need for the recreation facility or park land and the type of development project upon which the fee is imposed (Westrup 2002).

3.6.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G thresholds of significance. A park and recreation impact is significant if implementation of the proposed General Plan would:

1) 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.

2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

METHODOLOGY

Evaluation of potential parks and recreation service impacts was based on review of the most recent recreation and facilities guides and other relevant literature. The impact analysis below focuses on whether those impacts would have a significant effect on the physical environment. The analysis of future parks and recreational facilities is based on current parkland standards as discussed above.

The following proposed General Plan policies address parks and recreation service:

Policy LU-31: *The City will work with other agencies to coordinate development with supporting infrastructure and services, such as water and sewer service, libraries, parks and recreational facilities, transportation systems, and fire/police/medical services.*

Policy OS-2: *Require the provision of recreation facilities concurrent with the development they serve.*

Policy OS-3: *Require new development to provide implementation strategies for the funding of both active and passive parks and recreational sites.*

Policy OS-4: *The City of Eastvale supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, community, and citywide level. To accomplish this in the future, the City will seek to establish its own Parks and Recreation Department and to assume control of parks and related facilities currently operated by the Jurupa Community Services District and the Jurupa Area Recreation and Park District.*

Policy OS-5: *Until the City establishes its own parks operation in fulfillment of Policy OS-4, the City will work with the Jurupa Community Services District and the Jurupa Area Recreation and Park District to provide parks, recreation, and trails.*

Policy OS-6: *New residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Land dedication and/or payment of in-lieu fees shall be required consistent with state law. Land dedication and/or fees may be required pursuant to other policies in this Chapter with or without the use of the authority provided in the Quimby Act, or in combination with the Quimby Act and other legal authority.*

PROJECT IMPACTS AND MITIGATION MEASURES

Increased Demand for Parks and Recreation Facilities (Standards of Significance 1 and 2)

Impact 3.6.3.1 Implementation of the proposed General Plan would accommodate population growth, which could subsequently increase the use of existing parks and recreation facilities and/or require the construction or expansion of park and recreational facilities to meet increased demand. This is considered to be a **less than significant** impact.

The Riverside County General Plan EIR determined that implementation of the Riverside County General Plan has less than significant impacts to parklands and recreation facilities. The proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan.

Full build-out of the General Plan Land Use Map would result in an increase of 8,030 persons in the city compared with the current population, for a total population of 61,698. This growth would require the construction or expansion of park and recreational facilities and increase the use of existing parks such that physical deterioration of the facility could occur or be accelerated. As described in the Existing Conditions section above, both JCSD and JARPD have established a requirement for dedication of five acres of parkland per 1,000 population and proposed Eastvale General Plan Policy OS-6 states that new residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five acres of land for parks per 1,000 residents.

Based on these standards, future development (build-out) under the proposed new General Plan would need to add approximately 40 acres of parkland (8,030 additional residents x 5 acres per 1,000 to meet the anticipated demand). In addition, 65.5 acres of parklands are needed to meet the standards at the time of this analysis (2012). The provision of these additional park and recreation areas could result in adverse physical effect on the environment. The specific environmental impacts resulting from the provision of this park are currently being identified by a project-level environmental review, as of 2012. The typical environmental effects regarding the construction and operation of parks and recreational facilities may involve issues with noise (during construction and operation of the playfields and playgrounds), air quality (during the

construction of the facility), biological resources (depending on location), historic/cultural resources (depending on location), public services and utilities (demand for police and fire protection, electric, water, and wastewater service), and traffic on a local neighborhood level. The specific environmental effects of construction will be considered for each park project.

In addition, the policies included in the proposed General Plan support continued cooperation with JCSD and other agencies (such as JARPD) to require that development of recreation facilities occurs concurrently with other development, and to require new development to provide implementation strategies for the funding of both active and passive parks and recreational sites (Policies OS-2 and OS-3). To that end, future development projects would be required to pay development impact fees for park facilities on behalf of the city in order to fund the development and maintenance of Eastvale parks and community use facilities to the extent such is needed as a result of new development. Implementation of the proposed General Plan policies, along with project-level environmental review, would ensure that future development under the proposed General Plan would provide and maintain adequate park and recreation facilities consistent with parkland standards. Project-level environmental review would also ensure that site-specific environmental impacts associated with the provision of such facilities would be identified and mitigated. Therefore, this impact is **less than significant**.

3.6.3.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for parks and recreation consists of JCSD's and JARPD's service area boundary. Any existing, planned, proposed, approved, and reasonably foreseeable development within these service areas could contribute to cumulative impacts. The reader is referred to Section 3.0 for a discussion of assumed land uses and development conditions associated with the proposed General Plan.

Cumulative Park and Recreation Demands (Standards of Significance 1 and 2)

Impact 3.6.3.2 Implementation of the proposed General Plan, along with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the use of existing parks and would require additional park and recreation facilities within the cumulative setting, the provision of which could have an adverse physical effect on the environment. This would be a **less than cumulatively considerable** impact.

Future development consistent with the proposed General Plan, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would increase the use of existing parks and would contribute to the cumulative demand for parks and recreational facilities and services in the service areas of both JCSD and JARPD. As previously discussed, the specific environmental impacts resulting from the provision of park and recreational facilities would be identified by project-level environmental review.

Individual development projects associated with the proposed General Plan would be subject to development impact fees to fund the provision of physical parkland, and the General Plan directs that the city pursue other park funding sources. These fees ensure that the city would adequately provide for park and recreation needs for residents, and environmental review of new development would mitigate any environmental impacts of park and recreational facilities. Therefore, the proposed General Plan would have a **less than cumulatively considerable** impact on parks and recreation services.

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4.0 CUMULATIVE IMPACTS

This section summarizes the cumulative impacts associated with the proposed General Plan using the same environmental issue areas as Section 3.0. Cumulative impacts are the result of combining the potential effects of the project (i.e., the proposed General Plan) with other existing, approved, proposed, and reasonably foreseeable development projects in the region. The following discussion considers the cumulative impacts of the relevant environmental issue areas.

4.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) contain an assessment of the cumulative impacts that could be associated with the proposed project. According to CEQA Guidelines Section 15130(a), "An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." *Cumulatively considerable* means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact is an impact created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *" . . . the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."*

In addition, Section 15130(b) identifies the following elements as necessary for an adequate cumulative impact analysis:

"1) Either:

(A) 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,

(B) 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 area-wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A definition of the geographic scope of the area affected by the cumulative effect and a reasonable explanation for the geographic limitation used;

3) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

4) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."

Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

4.2 CUMULATIVE SETTING

A general description of the cumulative setting is provided in Section 3.0, Introduction to the Environmental Analysis, as well as **Table 3.0-2**. In addition, each environmental issue area evaluated in the Draft EIR identifies its own cumulative setting. In general, the cumulative setting conditions considered in this Draft EIR are based on:

- **Local Adopted General Plans.** The existing land use plans in the Eastvale region, including those of Riverside County and the cities of Chino and Ontario.

- **Large-Scale Development Projects.** Consideration of large-scale proposed and approved development projects listed in **Table 3.0-2**. This list of projects is intended to describe large-scale proposed, approved, and reasonably foreseeable future development activities in the Eastvale region that, when considered with the proposed General Plan, have the potential to have cumulatively considerable impacts. It is not intended to be an all-inclusive list of projects in the Eastvale region.

- **Effect of Regional Conditions.** Consideration of background traffic volumes and patterns on highways (e.g., Interstate 15), background air quality conditions, and other associated environmental conditions that occur within the Inland Empire, both within and outside of the City.

- **Consideration of Existing Development Patterns.** Consideration of the current environmental conditions of existing development and past land use activities in the region.

In the case of the Transportation and Traffic analysis (Section 3.2), Fehr and Peers provided model forecasts for both Base Year (2007) and Future Year (2035) from the Riverside County Transportation Analysis Model (RivTAM) were used in the analysis. RivTAM is the county's travel demand model and accounts for ambient growth, approved future development, and roadway improvements throughout the County of Riverside.

4.3 CUMULATIVE IMPACTS ANALYSIS

The determination of whether the project's impact on cumulative conditions is considerable is based on a number of factors including consideration of applicable public agency standards, consultation with public agencies, and expert opinion. Identified below is a compilation of the cumulative impacts that would result from the implementation of the project and future development in the vicinity. As described above, cumulative impacts are multiple actions that, when combined, are considerable or compound other environmental effects. Each cumulative impact is determined to have one of the following levels of significance: less than cumulatively considerable, cumulatively considerable, or cumulatively considerable and significant and unavoidable. The specific cumulative impacts for each environmental issue area are identified in the technical sections of Section 3.0.

LAND USE AND AGRICULTURAL RESOURCES

Cumulative Land Use Impacts (Standards of Significance 1, 2, & 3)

Impact 3.1.3 Implementation of the proposed General Plan, along with regional and statewide growth, would result in a contribution to the conversion of agricultural land uses. This would be a **less than cumulatively considerable** impact.

The Riverside County General Plan EIR determined that the Riverside County General Plan would result in a significant and unavoidable cumulative impact to agriculture for which the County adopted a Finding of Overriding Consideration. Conversion of agricultural land within the City of Eastvale would contribute to the conversion of agricultural land consistent with impacts analyzed in the Riverside County General Plan EIR. However, the City does not have the land area to create agricultural land as suggested in the Riverside County General Plan, and other mitigation measures such as buffers and agricultural easements are impractical in an urban environment. Since implementation of the City of Eastvale General Plan will eventually result in the conversion of all of the existing agricultural land in the City to nonagricultural uses, and therefore contribute to the regional loss of agricultural land, this impact is **significant and unavoidable**.

TRANSPORTATION AND TRAFFIC

Cumulative Traffic Impacts on Local Roadways (Standards of Significance 1 & 2)

Impact 3.2.6 When considered with existing, proposed, planned, and approved development in the region, implementation of the proposed General Plan would contribute to cumulative traffic volumes in the region that result in significant impacts to level of service and operations. This is considered a **cumulatively considerable** impact.

The traffic impact analyses provided in Impact 3.2.1 are based on cumulative conditions (the buildout of Eastvale by the year 2035 that takes into account anticipated traffic volumes from development in the region). The buildout of Eastvale under the proposed General Plan would add substantial traffic volumes on local roadways that would result in significant traffic impacts within Eastvale as well as in adjoining jurisdictions. Improvements to regional transportation facilities associated with cumulative traffic conditions are intended to be addressed through implementation of regional programs, such as the SCAG Regional Transportation Plan.

Implementation of proposed General Plan policies would assist in reducing its cumulative contribution to regional traffic effects (see Impact 3.2.1 regarding specific policies that address traffic impacts). However, this impact would still be considered **cumulatively considerable** and **significant and unavoidable**.

AIR QUALITY

Result in a Cumulatively Considerable Net Increase in Nonattainment Criteria Pollutant (Standard of Significance 3)

Impact 3.3.7 Implementation of the proposed General Plan, in combination with cumulative development in the SoCAB, would result in a cumulatively

considerable net increase of ozone and coarse and fine particulate matter. This is considered a **less than cumulatively considerable** impact.

The SCAQMD's approach for assessing cumulative impacts is based on the 2007 AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state Clean Air Acts. As discussed earlier, the proposed General Plan would be consistent with the 2007 AQMP, which is intended to bring the SoCAB into attainment for all criteria pollutants. While the projected Eastvale buildout emissions calculated (see **Table 3.3-6**) surpass the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards, approximately 80 to 90 percent of the city's residential areas have already been built as of 2012. Therefore, a substantial amount of the emissions depicted in **Table 3.3-6** account for those already being generated.

Furthermore, as previously stated, the buildout projections of the General Plan Planning Area under the proposed new Eastvale General Plan Land Use Map are the same as projected under the existing Riverside County General Plan as the proposed City of Eastvale General Plan will not include changes to the existing Land Use Map. Therefore, no development beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed Eastvale General Plan and buildout assumptions for Eastvale would be the same as the buildout assumptions for the city in the 2003 Riverside County General Plan. Therefore, while buildout of the City of Eastvale would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which SoCAB is in nonattainment, the proposed Eastvale General Plan would not result in a new or substantially more severe significant impact compared with the currently adopted Riverside County General Plan. Thus, this impact is considered **less than cumulatively considerable**.

WATER RESOURCES

Cumulative Water Resource Impacts (Standards of Significance 1 and 2)

Impact 3.4.3 Implementation of the proposed General Plan, in combination with current land uses in the surrounding region, could introduce substantial grading, site preparation, and an increase in urbanized development. Increased development would contribute to cumulative groundwater quality impacts as well as increase the cumulative demand for water supplies that are considered **less than cumulatively considerable**.

As described under Impacts 3.4.1 and 3.4.2, the proposed Eastvale General Plan would not include changes to the existing (County of Riverside) Land Use Map. As a result no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed General Plan. Therefore, the proposed Eastvale General Plan would result in no greater impact to the Chino Groundwater Basin than that previously disclosed in the Riverside County General Plan EIR.

Pumping within the Chino Basin is managed and reported by the Chino Basin Watermaster. The Chino Basin Watermaster is the oversight agency responsible for recharging and preventing overdraft within the Chino Basin. Groundwater management activities of the Chino Basin are implemented through the OBMP that was developed for the Chino Basin in 2000, pursuant to the judgment, described previously. Pursuant to the judgment, the Watermaster files an annual report of Watermaster activities with the court each year. Upon completion of the OBMP in 2000, specific tasks and activities were assigned to Watermaster's legal and engineering services in the

implementation of the OBMP. A fundamental premise of the judgment is that all Chino Basin water users will be allowed to pump sufficient water from the Chino Basin to meet their requirements. To the extent that pumping exceeds the share of the safe yield, assessments are levied by the Watermaster to replace the overproduction.

The OBMP will continue to guide Chino Groundwater Basin activities. The OBMP contains several elements designed to provide enhanced management of the local groundwater basin resource, including protection of the water supply of the basin. Any impacts to the Chino Basin associated with the proposed General Plan would be mitigated by a combination of recharge and other groundwater management activities accomplished by the Chino Basin parties, and coordinated by the Watermaster.

Implementation of the proposed General Plan policies, as well as the continued efforts of the Watermaster, would ensure that the proposed General Plan's contribution to cumulative water quality and water supply impacts would be mitigated. Thus this impact would be **less than cumulatively considerable**.

GREENHOUSE GASES AND CLIMATE CHANGE

Generate Greenhouse Gas Emissions that May Have a Significant Impact on the Environment (Standard of Significance 1)

Impact 3.5.1 Implementation of the proposed General Plan will result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This is considered a **cumulatively considerable** impact.

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

Construction GHG Emissions

Subsequent development proposed under the General Plan would result in direct emissions of GHGs from construction. As noted in Section 3.3, Air Quality, the quantification of emissions resulting from future construction activities in Eastvale under the proposed General Plan is not possible due to project-level variability and uncertainties related to future individual projects. However, all construction projects can produce GHG emissions and all future development projects under the proposed General Plan would be subject to SCAQMD rules and regulations in effect at the time of construction, as stipulated by proposed Policy AQ-19, which requires the analysis and mitigation of GHG emissions during development project review, pursuant to CEQA. SCAQMD recommends GHG quantification of all development proposals and as stated previously, SCAQMD provides tiered GHG significance threshold guidance. The SCAQMD Tier 3 recommends a significance threshold for all new development types and recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

While adherence to SCAQMD recommended GHG thresholds would not offset GHG emissions resulting from construction activities, projected growth under the proposed Eastvale General

Plan would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR, as the proposed City of Eastvale General Plan retains the existing land use designations in the current Riverside County General Plan and would not include changes to the existing Land Use Map.

Operational GHG Emissions

Future growth in the City of Eastvale is guided by the land uses identified in the proposed General Plan Land Use Map and the proposed General Plan retains and would not change the existing land use designations in the current Riverside County General Plan. While implementation of the proposed Eastvale General Plan is anticipated to result in residential and nonresidential (retail, commercial, office, industrial, and other uses) development; such growth would not occur to an extent beyond that previously considered in the 2003 Riverside County General Plan EIR.

Table 3.5-4 summarizes the emissions associated with both existing conditions and build-out conditions in Eastvale.

TABLE 3.5-4
GREENHOUSE GAS EMISSIONS (BUILD-OUT) – METRIC TONS PER YEAR

Source	CO_2	CH_4	N_20	CO_2e
Eastvale Existing 2012 Conditions (Annual) – Metric Tons per Year[1]				
Area	10,773	5.1	0.2	10,946
Energy	105,794	3.9	1.9	106,451
Mobile	292,687	16.5	0.0	293,034
Solid Waste	23,421	1,384	0.0	52,487
Water	152,636	1,202	32.2	187,871
Total	**585,310**	**2,612**	**34**	**650,790**
Eastvale Build-out Conditions (Annual) – Metric Tons per Year[2]				
Area	13,174	6.2	0.3	13,384
Energy	144,638	5.4	2.5	145,537
Mobile	384,643	13.8	0.0	384,933
Solid Waste	35,854	2,119	0.0	80,351
Water	240,095	1,896	50	295,667
Total	**818,404**	**4,040**	**54**	**919,872**
Net Difference (Build-out Conditions – 2012 Existing Conditions)				
Net Difference	**233,094**	**1,428**	**20**	**269,082**

Source: CalEEMod 2011 (see Appendix 3.3-1).
[1] Existing residential units sourced from the proposed General Plan. Existing nonresidential square footage derived from Willdan 2009.
[2] Build-out conditions based upon Table 3.0-1 of this Draft EIR.

As shown in **Table 3.5-4**, under existing conditions (2012), the City of Eastvale generates 650,790 metric tons of CO_2e annually. With build-out of Eastvale, GHG emissions are calculated to grow to 919,872 metric tons per year.

As noted in the Standards of Significance discussion above, SCAQMD's GHG emission threshold is 6.6 metric tons of CO_2e per service population (residents plus employees) per year by the year 2020 and 4.1 metric tons of CO_2e per service population (residents plus employees) per year by the year 2035. SCAQMD's approach is to identify the emissions level for which a plan would not be expected to substantially conflict with existing California legislation (AB 32) adopted to reduce statewide GHG emissions. Based on the population and employment figures the 2012 service population was 59,307 and the build-out service population is anticipated to be 68,671. Dividing the GHG emissions for each time period yields a metric ton per service population ratio of 9.4 and 13.4 for existing conditions and build-out conditions, respectively. Both ratios are greater than the 6.6 metric tons per service population threshold and would result in a net increase in GHG emissions.

TABLE 3.5-5
EASTVALE BUILD-OUT GHG EMISSIONS PER SERVICE POPULATION

Per Capita Emissions	Emissions	Jobs	Population	Service Population (SP)	MTCO2e/SP/ Year
Eastvale Existing (2012) Conditions	650,790	5,639	53,668	59,307	9.4
Eastvale Build-out	919,872	6,973	61,698	68,671	13.4

As shown in **Table 3.5-4**, the majority of estimated GHG emissions generated at city build-out result from mobile emissions sources. The proposed General Plan seeks to reduce the environmental impact (including GHG emissions) of land use development by increasing the viability of walking, biking, and transit by allowing mixed-use projects which provide land use arrangements that reduce reliance on the automobile, and thus reduce GHG emissions, and improve opportunities for pedestrian, bicycle, and transit use. For example, proposed General Plan Policy LU-14 would allow mixed-use projects to develop in commercially designated areas in accordance with the guidelines of the Community Center Land Use Designation, and Policy LU-29 states that commercial uses should be located near transportation facilities and include facilities to promote the use of public transit (such as bus turnouts, bus shelters, etc.). Also, proposed Policy C-11 would allow for an alternative Level of Service (lower than level of service C) in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, alternative transportation and comfortable walking distance to goods and services in order to promote compact development, and Policy C-25 would require the incorporation of public transit service in the design of developments identified as major trip attractions (i.e., retail and employment centers).

The intent of proposed General Plan policies is to accommodate anticipated growth in a compact urban form, including mixed-use development, as well as focusing development along transit corridors and at other key locations. Furthermore, the proposed General Plan would not include changes to the existing (County of Riverside) Land Use Map and as a result no development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur with implementation of the proposed Eastvale General Plan.

However, GHG calculations predict emissions in excess of the SCAQMD threshold and would result in a net increase in GHG emissions. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

Conflict with Applicable Greenhouse Gas Reduction Plan (Standard of Significance 2)

Impact 3.5.2 Implementation of the proposed General Plan would not be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.) as interim SCAQMD thresholds would be surpassed. This is considered a **cumulatively considerable** impact.

The core mandate of AB 32 is that statewide GHG emissions in 2020 equal 1990 levels. AB 32 is anticipated to secure emission reductions through a variety of mechanisms, such as increasing energy efficiency and introducing more renewable energy sources. CARB has already begun to adopt strategies to reduce GHG emissions under AB 32. Strategies included in the Climate Change Scoping Plan, described in detail in Section 3.5, such as the California Light-Duty Vehicle GHG Standard, Renewable Portfolio Standard, and Low Carbon Fuel Standard, while applicable to land use projects, are generally not under the control of local agencies like the City of Eastvale. Nonetheless, emission reductions from these strategies are anticipated to occur as CARB adopts and implements regulations under AB 32. Reductions are already expected to take place in 2012 due to the newly adopted vehicle emission standards and the Low Carbon Fuel Standard.

It is the intent of AB 32 to reduce statewide GHG emissions by 15 percent below 2005 levels by 2020, which is equivalent to the goals of AB 32. As noted under Impact 3.5.1, build-out of the City of Eastvale would result in a net increase in cumulative GHG emissions. According to the proposed General Plan, two important steps in helping to reduce climate change impacts are the creation of an inventory of existing GHGs and a plan to reduce these emissions. A Climate Action Plan (CAP) is a guiding document to identify ways in which a city, county, or community can reduce GHG emissions and adapt to the inevitable effects of climate change. A common goal for a CAP is a 15 percent reduction below 2005 levels by 2020 in order to comply with AB 32. A CAP outlines transportation, land use, energy use, and waste production measures to achieve its target and proposes a timeline for implementation. CAPs are becoming increasingly popular as a way to spread awareness of climate change, reduce an area's impact on the environment, and save money on energy bills. Additionally, when referenced in general plans and environmental documents, CAPs signify a public agency's efforts to combat climate change. Compliance with local GHG reduction measures in new development is critical to ensuring the City's ability to meet GHG reduction goals consistent with state and regional goals.

However, these eventual requirements and their resulting effects on future GHG impacts cannot be known with any certainty as the City has not yet developed a CAP. Therefore the following mitigation is required.

Mitigation Measures

MM 3.5.2 Add the following Implementation Item to the Air Quality and Conservation Chapter of the General Plan:

"Implementation Item AQ-18.1: As funding permits the City will prepare a greenhouse gas inventory and climate action plan designed to reduce greenhouse gasses. The City may also participate in a regional climate action plan prepared by other. Until a climate action plan is adopted each project shall evaluate its impact on greenhouse gasses as part of the environmental process."

Mitigation measure **MM 3.5.2** requires the City to prepare a GHG inventory and CAP; however, embarking on this process, while mandated by this mitigation, will require additional funding that is not available at this time. While implementation of an upcoming CAP could potentially mitigate GHG emissions projected for build-out conditions consistent with the reduction goal of AB 32, the proposed General Plan has acknowledged that embarking on the process of CAP development is unable to occur at this time. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

PUBLIC SERVICES

Cumulative Demand for Fire Protection Services (Standard of Significance 1)

Impact 3.6.1.2 Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in Riverside County, could increase the demand for fire protection services and thus require additional staffing, equipment, and related facilities under cumulative conditions. The provision of these facilities could result in environmental impacts. The project's contribution to the need for expanded fire protection services is considered **less than cumulatively considerable**.

Future regional growth would result in increased demand for fire protection services throughout Riverside County. This cumulative regional demand could result in increased requests for mutual aid from the RCFD, and growth in the city could result in increased requests for mutual aid from any of the jurisdictions identified in **Table 3.6.1-1**. However, it is not anticipated that increased mutual aid requests would result in the need for additional fire protection facilities because mutual aid would be provided via existing facilities, equipment, and personnel at the time of the mutual aid request. Furthermore, as discussed under Impact 3.6.1.1, the environmental effects of the construction of a fire station on the west side of Eastvale is proposed separately from the proposed General Plan and will be required to undergo project-specific environmental review at such time as an application for the project was submitted. In addition, future fire protection facilities projects would be subject to project-level CEQA review at such time as an application for a project was submitted to the appropriate agency.

Project-level CEQA review of future fire protection facilities would ensure that cumulative environmental impacts associated with the continued provision of fire protection response services would be considered **less than cumulatively considerable**.

Cumulative Demand for Law Enforcement Services (Standard of Significance 1)

Impact 3.6.2.2 Implementation of the proposed General Plan, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Jurupa Valley Station service area, would increase the demand for law enforcement services and thus require additional staffing, equipment, and facilities, the construction of which could cause significant environmental impacts. The project's contribution to the need for expanded law enforcement services is considered **less than cumulatively considerable**.

Growth anticipated in association with the proposed General Plan would occur in Eastvale. As discussed in Impact 3.6.2.1, the proposed General Plan would not result in the need for additional law enforcement staffing, equipment, and facilities. Since the project would have a less than significant impact on law enforcement services provided by the Jurupa Valley Sheriff's

Station, it would not contribute significantly to cumulative impacts on these services. Therefore, this impact would be **less than cumulatively considerable**.

Cumulative Park and Recreation Demands (Standards of Significance 1 and 2)

Impact 3.6.3.2 Implementation of the proposed General Plan, along with other existing, planned, proposed, approved, and reasonably foreseeable development, would increase the use of existing parks and would require additional park and recreation facilities within the cumulative setting, the provision of which could have an adverse physical effect on the environment. This would be a **less than cumulatively considerable** impact.

Future development consistent with the proposed General Plan, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the region, would increase the use of existing parks and would contribute to the cumulative demand for parks and recreational facilities and services in the service areas of both JCSD and JARPD. As previously discussed, the specific environmental impacts resulting from the provision of park and recreational facilities would be identified by project-level environmental review.

Individual development projects associated with the proposed General Plan would be subject to development impact fees to fund the provision of physical parkland, and the General Plan directs that the city pursue other park funding sources. These fees ensure that the city would adequately provide for park and recreation needs for residents, and environmental review of new development would mitigate any environmental impacts of park and recreational facilities. Therefore, the proposed General Plan would have a **less than cumulatively considerable** impact on parks and recreation services.

5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines Section 15125.6(a) states that an environmental impact report (EIR) shall describe and analyze a range of reasonable alternatives to a project. These alternatives should feasibly attain most of the basic objectives of the project, while avoiding or substantially lessening one or more of the significant environmental impacts of the project. An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. The discussion of alternatives shall focus on those alternatives which are capable of avoiding or substantially lessening any significant environmental effects of the project, even if they impede the attainment of the project objectives to some degree or would be more costly (CEQA Guidelines Section 15125.6[b]).

According to the CEQA Guidelines, an EIR need only examine in detail those alternatives that could feasibly meet most of the basic objectives of the project. When addressing feasibility, CEQA Guidelines Section 15125.6 states "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites." CEQA Guidelines also specify that the alternatives discussion should not be remote or speculative; however, they need not be presented in the same level of detail as the assessment of the proposed project.

CEQA Guidelines indicate that several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail provided for each alternative. These factors include (1) the nature of the significant impacts of the proposed project; (2) the ability of alternatives to avoid or lessen the significant impacts associated with the project; (3) the ability of the alternatives to meet the objectives of the project; and (4) the feasibility of the alternatives. These factors would be unique for each project.

The significant environmental impacts of the project that the alternatives will seek to eliminate or reduce were determined and based upon the findings contained within each technical section evaluated in Sections 3.1 through 3.6 of this Draft EIR.

5.2 ALTERNATIVES UNDER CONSIDERATION

The reader is reminded that a fundamental goal of this project is to keep the physical characteristics of the proposed general plan identical to the existing Riverside County General Plan. By doing so, the proposed project should result in the same impacts as analyzed in the Riverside County General Plan EIR. Changes to the General Plan and Zoning Code were carefully reviewed to ensure that they either dealt with city rather than county-level procedures, or simply sought future study of an issue before making a change. As a result of this careful attention to detail, very little of the proposed project would result in an environmental impact not already addressed in the Riverside County General Plan EIR. Since there is no change between the existing and proposed conditions, there are no new environmental impacts, and consequently few opportunities for effective alternatives.

Two alternatives were identified for examination and analysis in this Draft EIR:

- Alternative 1 – No Project
- Alternative 2 – Prevent Agricultural Land Conversion

These alternatives constitute an adequate range of reasonable alternatives as required under CEQA Guidelines Section 15125.5.

ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

Off-Site Alternative

Off-site alternatives are generally evaluated in an environmental document to avoid, lessen, or eliminate the significant impacts of a project by considering the proposed development in an entirely different location. To be feasible, development of off-site locations must be able to fulfill the project purpose and meet most of the project's basic objectives. Given the nature of the proposed project (adoption of a General Plan for the entire City), it is not possible to consider an off-site alternative as the city boundaries have been established through incorporation. Further, this alternative would not meet the basic project objectives because consideration of another location would not address issues pertinent to the establishment of land use designations and policies to regulate the orderly development of the city. For this reason, an off-site alternative is considered infeasible pursuant to State CEQA guidelines 15126.6(c) and is being rejected as a feasible project alternative.

Reduced Area Alternative

The boundaries of the City were set as part of the incorporation process and the proposed project does not plan for any annexation of lands outside of the corporate limits. While reducing the size of the City to preclude agricultural land, for example, would address the conversion of agriculture impacts, it would result in an illogical boundary for the City. Further, there is no assurance that minimizing the boundary would prevent the conversion of agricultural land or any other significant and unavoidable impacts identified in this Draft EIR. For this reason, a reduced area site alternative is considered infeasible pursuant to State CEQA guidelines 15126.6(c) and is being rejected as a feasible project alternative.

Increased Density/Intensity Alternative

While the City has limited vacant land within its boundaries and no opportunity to annex land at a future date, the City will eventually need to allow increased density/intensity of development to accommodate future growth. The General Plan discusses this potential in the 'future projects' section of each chapter, but does not establish goals, policies, or objectives to implement an increased density/intensity alternative. While this alternative is attractive for a City with limited development potential, budget constraints forced on the City as a result of the state budget crisis precludes an increased density/intensity alternative to the General Plan. As a result, the proposed project makes no changes to the density/intensity of the existing Riverside County General Plan and zone districts. For this reason, an increased density/intensity alternative is considered infeasible pursuant to State CEQA guidelines 15126.6(c) and is being rejected as a feasible project alternative.

5.3 ALTERNATIVE 1 – NO PROJECT

DESCRIPTION OF ALTERNATIVE

Under this alternative, the proposed City of Eastvale General Plan would not be adopted and the current Riverside County General Plan, which Eastvale adopted upon incorporation in 2010, would remain in effect. The proposed General Plan retains the same land use designations and

roadway classifications as in the current Riverside County General Plan and therefore, the No Project Alternative would result in no difference compared to the proposed General Plan's land use patterns. However, under the No Project Alternative, existing Riverside County General Plan policies and programs would continue to be in effect and the proposed Eastvale-specific policy provisions proposed under the new General Plan would not go into effect.

ENVIRONMENTAL ANALYSIS

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.6. The reader is referred to these sections for further details on impacts associated with the proposed General Plan.

Land Use and Agricultural Resources

As identified in Section 3.1, Land Use and Agricultural Resources, the proposed General Plan would result in a significant and unavoidable impact to agricultural land by allowing the conversion of existing agricultural land to urban uses. As the proposed project keeps virtually the same designations and policies affecting agricultural land within the City of Eastvale as the Riverside County General Plan, the resulting impacts would remain identical. Similarly, the land use impacts would remain identical between the Riverside County General Plan and the proposed project.

Transportation and Traffic

Similar to Land Use, this alternative would keep the circulation policies of the Riverside County General Plan intact for use in the City of Eastvale. While the proposed project keeps the physical aspects of the Riverside County General Plan, it also includes policies encouraging complete streets, pedestrian and trail access and an emphasis on accessibility for public transit. These policies enhance the future development potential and are intended to reduce vehicle miles travelled and encourage more nonmotorized transportation. As the policies encouraging a more holistic approach to transportation are absent from the Riverside County General Plan, this alternative would result in slightly worse impacts than the proposed project.

Air Quality

As identified in Section 3.3, Air Quality, the proposed General Plan would not result in any significant impacts related to the air quality beyond that previously addressed in the Riverside County General Plan EIR. While Alternative 1 would result in similar effects to air quality as the proposed General Plan due to the fact that both would contain the same land use designations, this alternative would not include the extensive and specific air quality-related policies required for new development, found in the proposed General Plan. For example, proposed General Plan Policy LU-14 would allow mixed-use projects to develop in commercially designated areas in accordance with the guidelines of the Community Center Land Use Designation, and proposed Policy C-25 would require the incorporation of public transit service in the design of developments identified as major trip attractions (i.e., retail and employment centers). Also, proposed Policy C-11 would allow an alternative Level of Service (lower than level of service C) in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, alternative transportation and comfortable walking distance to goods and services in order to promote compact development. Alternative 1 would have the same less than significant impact as the proposed General Plan as far as toxic air contaminant (TAC) emissions are concerned.

Water Resources

The proposed General Plan would not result in any significant impacts to water resources (see Section 3.4) either by impacting the groundwater aquifer underlying the city or by increasing demand for water supply and thus requiring increased groundwater production.

No development beyond that previously considered in the 2003 Riverside County General Plan EIR would occur under the proposed General Plan or under Alternative 1. While Alternative 1 would result in similar effects to water resources as the proposed General Plan due to the fact that both would contain the same land use designations, this alternative would not include the extensive policies regarding water conservation as found in the proposed General Plan. For example, the proposed General Plan proposes Policy LU-31, which requires that adequate and available water resources are available to meet service demands as development occurs in Eastvale. This water conservation policy would not be implemented under Alternative 1.

Greenhouse Gases and Climate Change

The proposed General Plan would result in increased greenhouse gas (GHG) emissions above existing conditions and would result in a significant and unavoidable impact to climate change. Alternative 1 would result in the same amount and type of development and would therefore generate the same amount of GHG emissions. Furthermore, the South Coast Air Quality Management District (SCAQMD) GHG significance threshold would still be exceeded. Alternative 1 does not contain any of the Eastvale-specific policy provisions that address the reduction of automobile dependence and correlative GHG emissions, such as those described under Air Quality above.

In addition, Alternative 1 does not mandate the eventual development of an Eastvale Climate Action Plan (CAP). A CAP is a guiding document to identify ways in which a city, county, or community can reduce GHG emissions and adapt to the inevitable effects of climate change. A common goal for a CAP is a 15 percent reduction below 2005 levels by 2020 in order to comply with Assembly Bill 32 (described in Section 3.5). A CAP outlines transportation, land use, energy use, and waste production measures to achieve its target and proposes a timeline for implementation. While the eventual development of an Eastvale CAP and its resulting effects on future GHG impacts cannot be known with any certainty as the City has not yet developed a CAP, an upcoming CAP could potentially mitigate GHG emissions projected for buildout conditions. As previously stated, Alternative 1 does not instigate the eventual development of an Eastvale CAP while the proposed General Plan does.

Public Services

Fire Protection Impacts

The proposed General Plan would not result in any significant impacts associated with the provision of fire protection.

Alternative 1 would result in the same service demands for fire protection services given the exact same development potential as compared to the proposed General Plan.

Law Enforcement Service Impacts

The proposed General Plan would not result in any significant impacts associated with the provision of law enforcement services.

Alternative 1 would result in the same service demands for law enforcement services given the exact same development potential as compared to the proposed General Plan.

Parks and Recreation Impacts

The proposed General Plan would not result in any significant park or recreation service impacts.

Alternative 1 would result the same park and recreation service demand as a result of the exact same development potential compared to the proposed General Plan.

5.4 ALTERNATIVE 2 – PREVENT AGRICULTURAL LAND CONVERSION

DESCRIPTION OF ALTERNATIVE

Under this alternative, the City would modify the proposed General Plan to prevent the conversion of land designated and zoned for agricultural use to urban uses. For purposes of this alternative it is also assumed that land designated for urban development but zoned for agricultural use would also remain in agriculture.

ENVIRONMENTAL ANALYSIS

The following analysis is based on the significant environmental impacts identified in Sections 3.1 through 3.6. The reader is referred to these sections for further details on impacts associated with the proposed General Plan.

Land Use and Agricultural Resources

The City has approximately 60.96 acres of land that is both designed and zoned for agricultural usage. An additional 200 acres of land are zoned for agricultural use, but have an existing Riverside County General Plan Designation that allows for development (Table HNA-21, Appendix A, Housing Needs Assessment). The majority of the 200 acres consists of parcels less than an acre in size, most likely too small to support commercial agriculture. There are no Williamson Act contract lands within the City, and in most instances the existing urban development boundary is immediately adjacent to the existing agricultural use.

This alternative would ensure that none of the land designated and zoned for agricultural use would be converted to urban uses. This would reduce the significant and unavoidable impact identified in Section 3.1, Land Use and Agricultural Resources, of the Draft EIR. Ideally, this alternative could also prevent the conversion of lands zoned for agricultural use; however, some of this land is less than one acre in size and likely only suited as a home site. Other parcels are in the 1- to 10-acre size and could function as small farms or ranches. These uses are permitted under the current land use designation and zone districts.

Keeping the agricultural land from officially converting to urban uses may be prevented by this alternative; however, the existing urban uses will significantly reduce the economic viability of the land. Regardless, this alternative would prevent the conversion of agricultural land to urban uses and therefore eliminate the immediate significant and unavoidable impact associated with the proposed project. It is likely that the cumulative impact of this alternative will be similar to that of the proposed project, as the effect of the urban areas will be to severely limit or preclude agriculture on these parcels. While the land use or zoning district would remain 'agriculture,' the actual use would not.

Transportation and Traffic

Under this alternative, approximately 260 acres of land would remain in agriculture and therefore would not generate the same amount of traffic projected by the regional model. If these parcels remain undeveloped, and the anticipated growth does not occur in the City of Eastvale, there would be a minor reduction in traffic impacts. If all land were developed to single-family density, roughly 1,300 homes could result. With 1,300 fewer homes it would be reasonable to expect approximately 10,000 fewer average daily vehicle trips on local roadways. As noted in Section 3.2, Transportation and Traffic, the City will see significant traffic on Limonite, Schleisman and Etiwanda Avenues near their connection to Interstate 15, resulting in unacceptable levels of service (LOS) at these locations. Even if all anticipated traffic reduction were allocated to one of the three locations, they would remain at unacceptable levels of service. Therefore the reduction in traffic from this alternative would reduce impacts at these locations, but not sufficiently to eliminate the anticipated LOS F. Further, it is likely that development pressure in the City would simply shift the development that would have occurred on these parcels to other lands within the City, resulting in similar traffic impacts. However, this analysis assumes that the traffic impacts from this alternative are slightly better than those of the proposed project.

Air Quality

As identified in Section 3.3, Air Quality, the proposed General Plan would not result in any significant impacts related to the air quality beyond that previously addressed in the Riverside County General Plan EIR.

A reduction in allowed residential units under Alternative 2 would reduce construction-related air pollutant emissions compared to the proposed Land Use Map. Construction-related pollutant emissions associated with this alternative (regional and localized construction-related air pollutant emissions) would be slightly reduced. Alternative 2 would result in reduced development and reduced total vehicle miles traveled (VMT), in turn reducing the extent of criteria air pollutant emissions as compared to the proposed General Plan. However, as with the proposed General Plan Land Use Map, due to the scale of development activity associated with buildout of this alternative, emissions would continue to be generated.

Alternative 2 would have the same impact as the proposed General Plan as far as TAC and odor emissions are concerned, as these emissions are not associated with residential development. While Alternative 2 would contribute to excessive carbon monoxide emission impacts to a slightly lesser extent than under the proposed General Plan as a result of less VMT, Section 3.3 of this Draft EIR has determined that the proposed General Plan would result in less than significant impacts in regards to this issue.

Air quality impacts for Alternative 2 could be mitigated similar to the proposed General Plan through the application of proposed policies identified in Section 3.3, Air Quality.

Water Resources

The proposed General Plan would not result in any significant impacts to water resources (see Section 3.4) either by impacting the groundwater aquifer underlying the city or by increasing demand for water supply and thus require increased groundwater production.

Alternative 2 would result in reduced water supply demands as a result of reduced development potential by approximately 18,862.4 gallons per day in residential demand as compared to the

proposed General Plan. This reduced water demand would also reduce the extent of infrastructure required to service buildout under Alternative 2.

Greenhouse Gases and Climate Change

The proposed General Plan would result in increased GHG emissions above existing conditions and would result in a significant and unavoidable impact to climate change. Alternative 2 would result in a reduced amount of residential development and therefore population growth, resulting in the generation of less GHG emissions. However, the SCAQMD GHG significance threshold would still be exceeded under this alternative, as this is the case even under existing (2012) conditions.

Public Services

Fire Protection Impacts

The proposed General Plan would not result in any significant impacts associated with the provision of fire protection.

Alternative 2 would result in reduced service demands for fire protection services, given reduced residential development potential as compared to the proposed General Plan.

Law Enforcement Service Impacts

The proposed General Plan would not result in any significant impacts associated with the provision of law enforcement services.

Alternative 2 would result in reduced service demands for law enforcement services, given reduced residential development and associated population growth potential as compared to the proposed General Plan.

Parks and Recreation Impacts

The proposed General Plan would not result in any significant parks or recreation service impacts.

Alternative 2 would result in reduced parks and recreation service demand as a result of reduced residential development and associated population growth as compared to the proposed General Plan.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 5.0-1 provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed General Plan. The impact significance is identified for each alternative as well as the ranking of the impact as compared to the proposed General Plan. A "B" ranking means that the alternative would be "better" or would have less of an environmental impact than the proposed General Plan, while a "W" ranking means the alternative would result in a "worse" impact. The "S" ranking identifies where the alternative has a "similar" impact as the proposed General Plan. Based upon the evaluation described in this section, Alternative 2 would be the environmentally superior alternative. The proposed project, with additional policies to assist with reducing air quality impacts, encourage

master planning, mixed-use and expand trails and transit, is the next environmentally superior alternative.

TABLE 5.0-1
SUMMARY COMPARISON OF ALTERNATIVES

Environmental Impacts	Proposed General Plan	No Project Alternative	Prevent Agricultural Land Conversion Alternative
Land Use and Agricultural Resources			
Impact 3.1.1 Implementation of the proposed General Plan would result in the conversion of agricultural land uses to nonagricultural use.	Significant and Unavoidable	Significant and Unavoidable	Less Than Significant
Rank		S	B
Transportation and Traffic			
Impact 3.2.1 Implementation of the proposed General Plan would result in unacceptable traffic operations on City roadway facilities. This would be a significant and unavoidable impact.	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Rank		W	B
Air Quality			
Impact 3.3.1 Subsequent land use activities associated with implementation of the proposed General Plan would not conflict with or obstruct implementation of the 2007 Air Quality Management Plan.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	S
Impact 3.3.2 Subsequent land use activities associated with implementation of the proposed General Plan could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Rank		S	B
Impact 3.3.3 Subsequent land use activities associated with implementation of the proposed General Plan could result in long-term, operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter.	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Rank		S	B

Environmental Impacts	Proposed General Plan	No Project Alternative	Prevent Agricultural Land Conversion Alternative
Impact 3.3.4 Implementation of the proposed General Plan could result in population and employment that would increase traffic volumes on area roadways. This could result in elevated carbon monoxide emissions from motor vehicle congestion that could expose sensitive receptors to elevated carbon monoxide concentration.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Impact 3.3.5 Subsequent land use activities associated with implementation of the proposed General Plan could result in projects that would include sources of toxic air contaminants which could affect surrounding land uses.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Impact 3.3.6 Subsequent land use activities associated with implementation of the proposed General Plan could include sources that could create objectionable odors affecting a substantial number of people or expose new residents to existing sources of odor.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	W
Water Resources			
Impact 3.4.1 Implementation of the proposed General Plan could result in the degradation of groundwater quality and may violate water quality standards and/or degrade water quality resulting from future land uses.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Impact 3.4.2 Implementation of the proposed General Plan could increase demand for water supply and thus require increased groundwater production, which could result in significant effects on the physical environment.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Greenhouse Gases and Climate Change			
Impact 3.5.1 Implementation of the proposed General Plan will result in greenhouse gas emissions that would further contribute to significant impacts on the environment.	Cumulatively Considerable and Unavoidable	Cumulatively Considerable and Unavoidable	Cumulatively Considerable and Unavoidable
Rank		W	B

Environmental Impacts	Proposed General Plan	No Project Alternative	Prevent Agricultural Land Conversion Alternative
Impact 3.5.2 Implementation of the proposed General Plan would not be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.) as interim SCAQMD thresholds would be surpassed.	Cumulatively Considerable and Unavoidable	Cumulatively Considerable and Unavoidable	Cumulatively Considerable and Unavoidable
Rank		W	B
Public Services			
Impact 3.6.1.1 Implementation of the proposed General Plan could result in the need for additional fire protection services facilities in order to maintain acceptable service ratios and response times.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Impact 3.6.2.1 Implementation of the proposed General Plan would not result in increased demand for law enforcement services that would result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B
Impact 3.6.3.1 Implementation of the proposed General Plan would accommodate population growth, which could subsequently increase the use of existing parks and recreation facilities and/or require the construction or expansion of park and recreational facilities to meet increased demand.	Less Than Significant	Less Than Significant	Less Than Significant
Rank		S	B

6.0 LONG-TERM IMPLICATIONS

This section discusses additional topics statutorily required by the California Environmental Quality Act (CEQA) concerning the long-term implications of the proposed General Plan. The topics discussed include growth-inducing impacts, significant irreversible environmental changes, including irretrievable commitment of resources, and significant and unavoidable environmental impacts.

6.1 GROWTH-INDUCING IMPACTS

INTRODUCTION

CEQA Guidelines Section 15126.2(d) requires that an Environmental Impact Report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *"The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth . . . It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment."*

A project can have direct and/or indirect growth inducement potential. For example, direct growth inducement would result if a project involved construction of new housing. A project would have indirect growth-inducement potential if it established substantial new permanent employment opportunities or involved a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it removed an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with, or accommodated by, the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

COMPONENTS OF GROWTH

The timing, magnitude, and location of land development and population growth in a community are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and nonresidential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or

conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROJECT

Based on Government Code Section 65300, the proposed General Plan is intended to serve as the overall plan for the physical development of the City of Eastvale. While the General Plan does not propose any specific development projects, it does accommodate as well as regulate future population and economic growth of the city that would result in direct and indirect growth-inducing effects.

Implementation of the proposed General Plan would retain the existing land use designations in the current Riverside County General Plan and similarly, roadway classifications and other physical planning in the Riverside County General Plan remain unchanged under the proposed General Plan. The proposed General Plan would also establish new policy provisions that will guide and manage future development and land uses in the city. This would also include policy direction on roadway facility improvements, public service improvements, and the extension and expansion of utilities. The specific environmental effects resulting from the direct growth effects of proposed land use patterns and associated extension of public services are discussed in Sections 3.1 through 3.6 of this Draft EIR. The following is a discussion of the potential growth-inducing effects of the project.

Population Growth

Populations projections of the General Plan Planning Area under the proposed new General Plan Land Use Map are the same as projected under the existing Riverside County General Plan, as the proposed City of Eastvale General Plan will not include changes to the existing Land Use Map. Therefore, no development or population growth beyond that previously identified in the 2003 Riverside County General Plan would occur as a result of the proposed General Plan. **Table 3.0-1** summarizes total housing, population and job numbers for the proposed General Plan build-out conditions, which are a combination of existing development conditions in 2012 and future development projections. As of 2012, it is estimated that approximately 80 to 90 percent of the city's residential areas have already been built. While this General Plan was prepared with a time horizon of at least 20 years, with even a modest rebound in the regional economy, build-out of Eastvale could easily occur with the next decade, and certainly within the General Plan's expected 20-year timeframe.

Growth Effects Associated with Infrastructure Improvements

The proposed General Plan could indirectly induce growth if it removed an obstacle to additional growth and development, such as a constraint on a required public service. The City's infrastructure and public services are largely provided by other public and private service providers that utilize master plans for guiding planned facility and service expansions which are subject to environmental review under CEQA. The proposed General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the proposed General Plan. Therefore, significant growth effects resulting from infrastructure improvements as a result of implementing the updated General Plan are not anticipated.

ENVIRONMENTAL EFFECTS OF GROWTH

As described above, the proposed General Plan would retain the existing land use designations in the current Riverside County General Plan. Therefore, no development beyond that previously

identified in the 2003 Riverside County General Plan would occur as a result of the proposed General Plan. The proposed General Plan policy provisions and its Land Use Map would provide for this anticipated growth, and would not result in outward expansion of the city's boundaries. Thus, growth accommodated under the proposed General Plan would be confined to the existing City of Eastvale boundaries and would avoid growth effects of sprawl development patterns or induced growth on parcels adjacent to the city. The environmental effects of build-out of the General Plan are addressed in Sections 3.1 through 3.6 of this Draft EIR, and the project's cumulative impacts are addressed in Section 4.0.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Sections 21100(b)(2) and 21100.1(a) require that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes that would result from project implementation. In addition, CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes in the following manner:

> *"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

Implementation of the proposed General Plan could result in the conversion of undeveloped properties to residential, commercial, office, public, and recreational uses. Subsequent development under the General Plan would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of those sites to their original condition.

Development of the city would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure. Renewable, nonrenewable, and limited resources that would likely be consumed as part of the development of the proposed project would include, but are not limited to, oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials. In addition, development of the project would result in the increased demand on public services (see Section 3.6, Public Services).

6.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. In addition, Section 15093(a) of the CEQA Guidelines allows the decision-making agency to determine whether the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares a "Statement of Overriding Considerations" setting forth the specific reasons for making such a judgment.

The following impacts of the proposed General Plan, which have been recognized as "significant and unavoidable" in either the project or cumulative context, are specifically identified in Sections 3.1 through 3.6 and Section 4.0 of this Draft EIR. The reader is referred to the various environmental issue areas of these sections for further details and analysis of these significant and unavoidable impacts.

LOSS OF AND CONVERSION OF AGRICULTURAL LAND, INCLUDING LANDS UNDER WILLIAMSON ACT CONTRACTS, THROUGH AGRICULTURAL/URBAN INTERFACE CONFLICTS

Impact 3.1.1 Implementation of the proposed General Plan would result in the conversion of agricultural land uses to nonagricultural use. This is considered a **significant and unavoidable** impact.

The Riverside County General Plan EIR determined that the conversion of agricultural land uses as a result of implementation of the Riverside County General Plan would be a significant and unavoidable impact for which the County adopted a Finding of Overriding Consideration. While the proposed City of Eastvale General Plan does not change the existing Land Use Map, implementation of the General Plan would result in the conversion of agricultural land to urban uses. This impact remains **significant and unavoidable**.

CUMULATIVE LAND USE IMPACTS

Impact 3.1.3 Implementation of the proposed General Plan, along with regional and statewide growth, would result in a contribution to the conversion of agricultural land uses. This would be a **cumulatively considerable** impact.

The Riverside County General Plan EIR determined that the Riverside County General Plan would result in a significant and unavoidable cumulative impact to agriculture for which the County adopted a Finding of Overriding Consideration. Conversion of agricultural land within the City of Eastvale would contribute to the conversion of agricultural land consistent with impacts analyzed in the Riverside County General Plan EIR. However, the City does not have the land area to create agricultural land as suggested in the Riverside County General Plan, and other mitigation measures such as buffers and agricultural easements are impractical in an urban environment. Since implementation of the City of Eastvale General Plan will eventually result in the conversion of all of the existing agricultural land in the City to non-agricultural uses, and therefore contribute to the regional loss of agricultural land, this impact is **Cumulatively Considerable, significant and unavoidable**.

CITY TRAFFIC FACILITIES

Impact 3.2.1 Implementation of the proposed General Plan would result in unacceptable traffic operations on City roadway facilities. This would be a **significant** impact.

All of the City roadway facilities will operate acceptably during the peak hour, with the exception of three roadway segments. This projection represents a conservative assumption of development as proposed General Plan policy provisions seek to improve roadway connections, increase travel choice, reduce vehicle miles traveled, support economic development, accommodate efficient goods movement, and support other community goals. For instance, new streets would be designed to accommodate all modes of travel, including transit, bicycles, and vehicles (Policy C-15) as the General Plan aims to develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles (Policy C-16 through Policy C-23, Action C-17.1 and Action C-17.2, Policy C-25, and Policy C-26). In addition, Policy C-3 provides the mechanism to mitigate cumulative and indirect traffic impacts of future development through the payment of impact mitigation fees, and Policy C-9 states that private developers are responsible for the construction of new streets and providing access to highways for developing commercial, industrial, and residential areas. However,

despite these policy provisions, all of the City roadway facilities will operate acceptably during the peak hour with the exception of the three roadway segments resulting in a **significant and unavoidable** impact.

CUMULATIVE TRAFFIC IMPACTS ON LOCAL ROADWAYS

Impact 3.2.6 When considered with existing, proposed, planned, and approved development in the region, implementation of the proposed General Plan would contribute to cumulative traffic volumes in the region that result in significant impacts to level of service and operations. This is considered a **cumulatively considerable** impact.

Implementation of proposed General Plan policies would assist in reducing its cumulative contribution to regional traffic effects (see Impact 3.2.1 regarding specific policies that address traffic impacts). However, this impact would still be considered **cumulatively considerable** and **significant and unavoidable**.

GENERATE GREENHOUSE GAS EMISSIONS THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT

Impact 3.5.1 Implementation of the proposed General Plan will result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This is considered a **cumulatively considerable** impact.

Implementation of relevant policies from the proposed General Plan is anticipated to reduce GHG emissions of land use development by increasing the viability of walking, biking, and transit by allowing mixed-use projects which provide land use arrangements that reduce reliance on the automobile, and thus reduce GHG emissions and improve opportunities for pedestrian, bicycle, and transit use. Furthermore, GHG calculations predict emissions in excess of the SCAQMD threshold and would still result in a net increase in GHG emissions. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

CONFLICT WITH APPLICABLE GREENHOUSE GAS REDUCTION PLAN

Impact 3.5.2 Implementation of the proposed General Plan would not be consistent with the goals of AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, etc.) as interim SCAQMD thresholds would be surpassed. This is considered a **cumulatively considerable** impact.

Implementation of the upcoming Climate Action Plan (CAP) is anticipated to mitigate greenhouse gas (GHG) emissions projected for build-out conditions consistent with the goals of AB 32. However, the eventual requirements of the CAP and their resulting effects on future GHG impacts cannot be known with any certainty as the City has not yet developed a CAP. Embarking on this process, while the intent of the City, will require additional funding that is not available at this time. While implementation of an upcoming CAP could potentially mitigate GHG emissions projected for build-out conditions consistent with the reduction goal of AB 32, the proposed General Plan has acknowledged that embarking on the process of CAP development is unable to occur at this time. Thus, this impact is considered **cumulatively considerable** and **significant and unavoidable.**

7.0 Report Preparers

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