

CITY OF EASTVALE

LEAL MASTER PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT



Prepared for:

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JULY 2015

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JULY 2015

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EXECUTIVE SUMMARY

This section provides an overview of the proposed project, the Leal Master Plan and its environmental analysis. For additional detail regarding specific issues, please consult the appropriate chapter of Sections 3.1 through 3.13 (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 Leal Master Plan, pursuant to the California Environmental Quality Act (CEQA).

This EIR analysis focuses on significant environmental impacts that could arise from implementation of the proposed Leal Master Plan through development of the land uses within the Master Plan area. The EIR adopts this approach in order to provide record that the implementation of the proposed Leal Master Plan may produce significant environmental impacts. This EIR contains an existing plus project analysis.

ES.2 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 – No Project.** CEQA Guidelines Section 15126.6(e) requires that a No Project Alternative be evaluated in an EIR. The No Project analysis must discuss the circumstance under which the project does not proceed. The comparison is that of the proposed project versus what can reasonably be expected to occur on the properties should the proposed project not be approved. The analysis allows decision-makers to compare the impacts of approving the project with the impacts of not approving the project (CEQA Guidelines Section 15126.6(e)(3)(B)). However, the No Project Alternative is not intended to be a no action alternative under CEQA. Therefore, the No Project Alternative does not necessarily assume that the project site will remain in its currently, mostly undeveloped state. If no action is taken on the proposed project, it is reasonable to assume that another project would be proposed at some point in the future consistent with the General Plan and zoning designations.

City of Eastvale General Plan Policy LU-19 identifies possible future land uses, including office, civic, hotel, multi-family residential, and recreation and entertainment land uses, on the site and this direction led to development of the proposed project. While the General Plan anticipated a master plan for the proposed project site, the No Project Alternative would likely result in development consistent with the existing General Plan land use designations, which are Business Park, Medium Density Residential, and High Density Residential. Although the existing A-2 Heavy Agricultural Zone District would need to be changed to allow for future development consistent with the existing General Plan designations, and that rezoning would be a project, it is a more reasonable assumption of what would occur under the No Project Alternative than an approach that assumes the property would remain unchanged.

As such, Alternative 1 assumes that the existing City of Eastvale General Plan land use designations are the land uses for the future. Therefore, the No Project Alternative assumes that the project site would develop as shown in **Table 5.0-1**.

**TABLE 5.0-1
NO PROJECT SCENARIO BUILDOUT ASSUMPTIONS**

Land Use
564 HDR multi-family homes (apartments)
201 MDR single-family homes
1,200,000 sq. ft. of General Office uses

- **Alternative 2: Market Probable Scenario**

As discussed in Section 2.0, Project Description, it is unlikely that the maximum-case buildout would occur on the project site. The project under the maximum-case assumption would require buildings of several stories in height, stacked parking, and a density that would be unique in Eastvale and in all but the most urban areas of Riverside County.

Alternative 2, the Market Probable Scenario, assumes a lower intensity buildout scenario that is more likely given past and current market trends, existing development in the region, and site constraints. The buildout assumptions for Alternative 2 are shown in **Table 5.0-2**. The Market Probable Scenario assumes the same types of land uses as the proposed project, but with the non-residential uses developed at a lower intensity (less square footage).

**TABLE 5.0-2
MARKET PROBABLE SCENARIO BUILDOUT ASSUMPTIONS**

Land Use
660 multi-family homes (apartments);
1,000,000 sq. ft. of general retail (shopping center);
230,000 sq. ft. of general office;
230,000 sq. ft. of medical office;
450 hotel rooms; and
100,000 sq. ft. civic center

ES.4 AREAS OF ENVIRONMENTAL ISSUES

In accordance with Section 15082 of the state CEQA Guidelines, the City prepared a Notice of Preparation of an EIR for the project on March 9, 2015. The City was identified as the lead agency for the proposed project. This notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed project. A scoping meeting was held on March 18, 2015, to receive comments.

Section 1.0, Introduction, provides a summary of environmental issues related to the proposed Leal Master Plan and the Draft EIR, as presented to the City by agencies and the public during

the NOP review period. Issues raised in response to the NOP were considered during preparation of the Draft EIR. 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 Leal Master 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, in addition to the City of Eastvale General Plan and EIR. Impacts that were considered by the County to be significant and unavoidable (transportation/traffic, air quality, noise), are also considered significant and unavoidable by the City.

Implementation of the proposed Leal Master 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 implementation of the proposed Leal Master 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:

- Transportation/Traffic
- Air Quality
- Noise

These issues are summarized below. In the instances of City transportation, air pollutants, and traffic noise, impacts are the result of the Leal Master Plan.

The addition of project traffic is expected to degrade traffic operations at seven roadway segments:

- From LOS D to LOS E at Limonite Avenue between Archibald Avenue and Harrison Avenue
- From LOS E to LOS F at Limonite Avenue between Harrison Avenue and Scholar Way
- From LOS E to LOS F at Limonite Avenue between Scholar Way and Hamner Avenue
- From LOS C to LOS F at Hamner Avenue between Limonite Avenue and Bellegrave Avenue
- From LOS C to LOS D at I-15 south of Limonite
- From LOS C to LOS D at I-15 north of SR 60
- From LOS C to LOD D at Cantu-Galleano Ranch Road between I-15 Ramps and Hamner Avenue

In addition, the project adds traffic to two roadway segments already operating at LOS F: Limonite Avenue between Hamner Avenue and the I-15 southbound ramp and Limonite Avenue between the I-15 northbound ramps and Wineville Avenue. The resulting level of service at these roadway segments would conflict with the performance standard of LOS C on local roadways as identified in the City's General Plan and in the proposed Master Plan.

An expanded discussion of the significant and unavoidable impacts considered to result from short and long-term air pollutant emissions in Section 3.3 found that despite the imposition of certain mitigation measures, both construction-related and long-term, operational impacts to air quality from implementation of the Eastvale General Plan and Riverside County General Plan cannot be fully mitigated to a level below significance. Significance thresholds are projected to be exceeded at Master Plan buildout, therefore these impacts are considered significant and unavoidable.

General Plan Policy N-18 requires that natural buffers, setbacks, or other noise attenuation be established between freeways and urban arterial roadways and adjoining noise-sensitive areas and that noise mitigation practices be employed when designing all future streets and highways and when improvements occur along existing highway segments. All roadway improvements implemented in Eastvale and by the City would be required to comply with this policy. However, as discussed in Section 3.2, Transportation and Traffic, of this EIR, some of the roadway segments affected by the proposed project are not in Eastvale and would have improvements planned and implemented at a regional level. In these cases, noise mitigation practices/design cannot be guaranteed. Furthermore, it is possible that full mitigation of transportation-related noise impacts on existing uses in the city would be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. Therefore, these impacts are considered significant and unavoidable.

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Land Use			
Impact 3.1.1 The project would be considered to have a significant impact if it would physically divide an established community. No impact will occur. (Threshold 1)	NI	None required.	NI
Impact 3.1.2 The project would be considered to have a significant impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur. (Threshold 2)	NI	None required.	NI
Impact 3.1.3 The project would be considered to have a cumulatively considerable land use impact if it would result in future land use changes or intensification of development of other sites or be inconsistent with the Eastvale General Plan that expresses the long-term vision for the city and for this site specifically. Impacts would be less than cumulatively considerable . (Threshold 3)	LCC	None required.	LCC
Transportation and Traffic			
Impact 3.2.1 The project would be considered to have a significant impact if it would result in traffic volumes on area roadways that would exceed performance standards identified in the City's General Plan. This impact is potentially significant . (Threshold 1)	PS	MM 3.2.1a Fair share of funding shall be paid for widening Limonite Avenue along the project frontage from two to three lanes in each direction. Funding shall be determined and paid via the Riverside County Transportation Uniform Mitigation	PS

S – Significant

CC- Cumulatively Considerable

LS – Less Than Significant

SU – Significant and Unavoidable

NI No Impact

PS-Potentially Significant

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PCC Potentially
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ES EXECUTIVE SUMMARY

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>Fee (TUMF). Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS D operations and consistent with the Master Plan’s infrastructure phasing provisions.</p> <p><i>Timing/Implementation: Prior to approval of development plan or project</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p> <p>MM 3.2.1b A focused traffic study shall be prepared that demonstrates the project’s consistency with the transportation impact assessment (TIA) for the Leal Master Plan prepared by Fehr & Peers (2015). The traffic study shall assess the following:</p> <ul style="list-style-type: none"> • Parking; • Site access and on-site circulation; • Interaction of driveways with adjacent intersections (if appropriate); • Impacts on local intersections; • Impacts to pedestrian, transit, and bicycle facilities; and • Trip generation monitoring study to ensure that, as land develops in the Leal Master Plan area, the total 	

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PS-Potentially Significant LCC -Less than Cumulatively Considerable CS – Cumulative Significant SM- Significant but Mitigatable PCC Potentially Cumulatively Considerable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>development generates traffic at or below the levels assumed in this Draft EIR.</p> <p><i>Timing/Implementation: Prior to approval of development plan or project</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p> <p>MM 3.2.1c Hamner Avenue shall be widened between Limonite Avenue and Bellegrave Avenue to three lanes in each direction either directly or through fair-share funding as determined by infrastructure and/or facility financing plans approved for the Leal Master Plan. Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS F operations and consistent with infrastructure phasing provisions established as part of Master Plan implementation.</p> <p><i>Timing/Implementation: Prior to approval of development plan or project</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p>	
<p>Impact 3.2.2 The project would be considered to have a significant impact if it would conflict with any level of service standards, travel demand measures, or other standards</p>	<p>LS</p>	<p>None required.</p>	<p>LS</p>

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
established by the Riverside County CMP. This impact is less than significant . (Threshold 2)			
Impact 3.2.3 The project would be considered to have a significant impact if it would result in a change in air traffic patterns. No impact would occur . (Threshold 3)	NI	None required.	NI
Impact 3.2.4 The project would be considered to have a significant impact if it would result in greater potential for hazards resulting from design features or siting of land uses. This is considered a less than significant impact due to policy provisions in the proposed Master Plan. (Threshold 4)	LS	See MM 3.2.1b .	LS
Impact 3.2.5 The project would be considered to have a significant impact if it would result in inadequate emergency access. This impact is considered less than significant . (Threshold 5)	LS	See MM 3.2.1b .	LS
Impact 3.2.6 The project would be considered to have a significant impact if it would conflict with policies, plans, or programs supporting alternative transportation or increase demand for transit facilities greater than planned capacity. This is considered a less than significant impact . (Threshold 6)	LS	None required.	LS
Impact 3.2.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to cumulative traffic volumes in the region, resulting in significant impacts to level of service and degradation of traffic operations. This is considered a cumulatively considerable impact . (Threshold 7)	CC	See MM 3.2.1a – MM 3.2.1c .	CC/SU

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Air Quality			
Impact 3.3.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of construction activity. This impact would be potentially significant . (Threshold 1)	PS	None required.	SU
Impact 3.3.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of long-term operations. This impact would be potentially significant . (Threshold 1)	PS	None required.	SU
Impact 3.3.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could conflict with regional air quality management planning. Impacts would be less than significant . (Threshold 2)	LS	None required.	LS
Impact 3.3.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to localized concentrations of carbon monoxide that would exceed applicable ambient air quality standards. Impacts would be less than significant . (Threshold 3)	LS	None required.	LS
Impact 3.3.5 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could result in exposure of sensitive receptors to substantial toxic emissions. This	PS	MM 3.3.5a A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold	LS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
would be a potentially significant impact. (Threshold 3)		<p>Methodology for construction activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific construction-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If SCAQMD risk thresholds would be exceeded, additional measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure that construction contracts include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Construction-generated air toxics pollutant mitigation measures may include but not be limited to:</p> <ol style="list-style-type: none"> 1. Limiting the amount of acreage to be graded in a single day. 2. Restricting intensive equipment 	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>usage and intensive ground disturbance to hours outside of hours typically spent at home.</p> <p>3. Notifying affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocating outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such measures may include but are not limited to the relocation of equipment or the rescheduling of construction outside of hours typically spent at home.</p> <p><i>Timing/Implementation:</i> The site-specific air</p>	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities</p> <p><i>Enforcement/Monitoring:</i> City of Eastvale Planning, Building and Safety, or Public Works Departments</p> <p>MM 3.3.5b A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for operational activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific operations-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter generated by heavy-duty haul trucks. If SCAQMD risk thresholds would be exceeded, additional mitigation measures shall be identified in the air toxics analysis to</p>	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p>address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and merchandise delivery schedule. The City shall ensure that operations include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Operations-generated air toxic pollutant mitigation measures may include but not be limited to:</p> <ol style="list-style-type: none"> 1. Redesigning the project site plan to locate proposed loading dock facilities as far from sensitive receptors as possible. 2. Posting signage stating the State-mandated prohibition on all project trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program. 3. Restricting the number of daily heavy-duty haul truck deliveries. <p><i>Timing/Implementation: The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities</i></p>	

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		<i>Enforcement/Monitoring: City of Eastvale Planning, Building and Safety, or Public Works Departments</i>	
Impact 3.3.6 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could result in exposure of sensitive receptors to substantial odorous emissions. The impact would be less than significant . (Threshold 4)	LS	None required.	LS
Impact 3.3.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan , in combination with existing, approved, proposed, and reasonably foreseeable development in the South Coast Air Basin, could significantly contribute to cumulative increases in emissions of criteria air pollutants that could contribute to future concentrations of pollutants for which the region is currently designated nonattainment. The impact would be considered cumulatively considerable . (Threshold 5)	CC	None required.	CC/SU
Climate Change			
Impact 3.4.1 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, under year 2020 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is less than cumulatively considerable . (Threshold 1)	LCC	None required.	LCC
Impact 3.4.2 The project would be considered to have a cumulatively	LCC	None required.	LCC

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
considerable impact if implementation of the proposed Master Plan, under year 2035 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is less than cumulatively considerable . (Threshold 1)			
Impact 3.4.3 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan could conflict with the goals of the Western Riverside Council of Governments Subregional Climate Action Plan. This impact is less than cumulatively considerable . (Threshold 2)	LCC	None required.	LCC
Aesthetics, Light, and Glare			
Impact 3.5.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would have a substantial adverse effect on a scenic vista. The project will have no impact on a scenic vista. (Threshold 1)	NI	None required.	NI
Impact 3.5.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would substantially damage scenic resources within a state scenic highway. There are no eligible or officially designated scenic highways in the vicinity of the project site and no impact would occur. (Threshold 2)	NI	None required.	NI

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Impact 3.5.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would substantially degrade the existing visual character or quality of the site and its surroundings. This impact is potentially significant . (Threshold 3)	PS	None required. ¹	LS

¹ Compliance with the provisions of the Master Plan, which also would comply with General Plan policies and the Eastvale Design Standards and Guidelines, will ensure that future development would not substantially degrade the existing visual character or quality of the site and its surroundings.

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<p>Impact 3.5.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would introduce new sources of substantial light and/or glare that could adversely affect day or nighttime views in the area. This impact is potentially significant. (Threshold 4)</p>	PS	<p>MM 3.5.1 Nonglare glass shall be used in all nonresidential buildings to minimize and reduce impacts from glare. Buildings that are allowed to use semi-reflective glass must be oriented so that the reflection of sunlight is minimized. Types of nonglare glass shall be specified on final development plans.</p> <p><i>Timing/Implementation: Prior to approval of final development plans</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p>	LS
<p>Insert 3.5.5 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, in combination with other reasonably foreseeable development projects in the region, would contribute to the alteration of the visual character of the region, impacts to scenic vistas, and increased glare/lighting. This impact is considered potentially significant. (Threshold 5)</p>	PS	See MM 3.5.1 .	LCC
Noise			
<p>Impact 3.6.1 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, as well as</p>	PS	<p>MM 3.6.1 An acoustical assessment shall be prepared that evaluates potential environmental noise impacts associated with the proposed project. Where the acoustical analysis determines that noise levels would</p>	LS

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noise levels in excess of standards established in the City of Eastvale General Plan Noise Element or the City of Eastvale Noise Ordinance. This impact is potentially significant . (Thresholds 1 and 3)		exceed applicable City noise standards, noise reduction measures shall be identified and included in the project. <i>Timing/Implementation: Prior to approval of development plan or project</i> <i>Enforcement/Monitoring: City of Eastvale Planning Department</i>	
Impact 3.6.2 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan would expose persons to or generate excessive groundborne vibration. This impact would be potentially significant . (Threshold 2)	PS	MM 3.6.2 A vibration assessment shall be prepared for construction projects that would involve the use of major vibration-generating equipment (e.g., pile drivers, vibratory rollers) within 200 feet of existing structures. Measures to reduce ground vibration levels shall be identified for any potential vibration impacts exceeding a vibration threshold of 0.2 in/sec ppv. <i>Timing/Implementation: Prior to approval of development plan or project</i> <i>Enforcement/Monitoring: City of Eastvale Planning Department</i>	LS
Impact 3.6.3 The project would be considered to have a significant impact if traffic generated by future development under the proposed Master Plan would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This is a potentially significant impact.	PS	See MM 3.6.1.	SU

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(Threshold 3)			
<p>Impact 3.6.4 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity. This impact is considered potentially significant. (Threshold 4)</p>	PS	<p>MM 3.6.3 A construction-related noise mitigation plan shall be submitted to the City for review and approval prior to issuance of a grading permit. The plan shall depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of the project.</p> <p><i>Timing/Implementation: Prior to issuance of grading permit</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p> <p>MM 3.6.4 The following mitigation measures shall be implemented and specified on all project construction plans:</p> <ul style="list-style-type: none"> a) <i>Clearing and construction activities shall be conducted outside of 6:00 p.m. and 6:00 a.m. during the months of June through September, and outside of 6:00 p.m. and 7:00 a.m. during the months of October through May (Municipal Code Chapter 8.52, Noise Regulation).</i> b) All construction equipment shall be kept properly tuned and use noise 	LS

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		reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. c) Construction equipment staging areas shall be centrally located on the project site or located at the farthest distance possible from nearby residential land uses. d) All motorized construction equipment and vehicles shall be turned off when not in use. <i>Timing/Implementation: During construction activities, noted on all project construction plans</i> <i>Enforcement/Monitoring: City of Eastvale Planning Department</i>	
Impact 3.6.5 The project would be considered to have a significant impact future development anticipated as a result of the proposed project would result in the exposure of people residing or working in the area to excessive noise levels from airports or private airstrips. No impact would occur. (Thresholds 5 and 6)	NI	None required.	NI
Impact 3.6.6 The project would be considered to have a cumulatively considerable impact if, under cumulative conditions, traffic noise levels from future development of the Leal	CC	See MM 3.6.1.	CC/SU

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<p>Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. This is a cumulatively considerable impact. (Threshold 7)</p>			
Biological Resources			
<p>Impact 3.7.1 Future development anticipated as a result of the proposed project could result in substantial adverse effects, either directly or through habitat modifications, to special-status species, which would be considered a potentially significant impact. (Thresholds 1 and 7)</p>	PS	<p>MM 3.7.1 All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.</p> <p>If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of</p>	LS

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		<p>personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.</p> <p><i>Timing/Implementation: Requirements shall be incorporated into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p>	
<p>Impact 3.7.2 Future development anticipated as a result of the proposed Leal Master Plan could result in impacts to sensitive biological communities, including riparian habitat and jurisdictional wetlands. This would be a potentially significant impact. (Thresholds 2 and 3)</p>	PS	<p>MM 3.7.2 Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the</p>	LS

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		<p>City for its records. <i>Timing/Implementation: Prior to approval of grading permits</i> <i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p> <p>MM 3.7.3 Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit. <i>Timing/Implementation: Prior to approval of grading permits</i> <i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p>	
<p>Impact 3.7.3 Future development anticipated as a result of the proposed project is unlikely to interfere with the movement of native resident or migratory fish or wildlife species. This would be a less than significant impact. (Threshold 4)</p>	<p>LS</p>	<p>None required.</p>	<p>LS</p>

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Impact 3.7.4 Implementation of the proposed Master Plan would not conflict with any local policies or ordinances protecting biological resources. There would be no impact . (Threshold 5)	NI	None required.	NI
Impact 3.7.5 Future development anticipated as a result of the proposed Master Plan could conflict with the provisions of the Western Riverside County MSHCP. This would be considered a less than significant impact. (Threshold 6)	LS	None required.	LS
Impact 3.7.6 Future development anticipated as a result of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the immediate area of the Master Plan area, will result in the conversion of habitat and impact biological resources. This impact is considered potentially cumulatively considerable . (Threshold 8)	PCC	See MM 3.7.1 – 3.7.3 .	LCC
Cultural Resources			
Impact 3.8.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could cause a substantial adverse change in the significance of an archaeological resource or an historical resource or disturb any human remains. This would be a potentially significant impact. (Thresholds 1 and 3)	PS	MM 3.8.1 A detailed cultural resources field survey of the subject property shall be conducted prior to approval of the project. The cultural resources field survey shall identify any cultural resource finds and will set out measures to mitigate any impacts to any significant resources as defined by CEQA, the California Register of Historical Resources, and/or the National Historic Preservation Act. Mitigation methods to be	LS

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		<p>employed include but are not limited to the following:</p> <ul style="list-style-type: none"> • Redesign of the development project to avoid the resource. The resource site shall be deeded to the City or a nonprofit agency to be approved by the City for maintenance of the site. • If avoidance is determined to be infeasible by the City, the resource shall be mapped, stabilized, and capped pursuant to appropriate standards. • If capping is determined to be infeasible by the City, the resource shall be excavated and recorded to appropriate standards. <p><i>Timing/Implementation: Prior to approval of development plan or project</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p> <p>MM 3.8.2 If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a</p>	

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		<p>professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery.</p> <p>The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of cultural resources.</p> <p><i>Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities</i></p> <p><i>Enforcement/Monitoring: City of Eastvale</i></p>	

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		<p><i>Planning Department</i></p> <p>MM 3.8.3 If human remains are discovered during any ground-disturbing activities in the project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.</p> <p><i>Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Planning Department</i></p>	

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<p>Impact 3.8.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geological feature. This would be a potentially significant impact. (Threshold 2)</p>	<p>PS</p>	<p>MM 3.8.4 If any paleontological resources (fossils) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Department shall be immediately notified. At that time, the City will coordinate any necessary investigation of the discovery with a qualified paleontologist.</p> <p>The City shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontological resources. The City and the project applicant shall consult and agree on implementation of a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of paleontological resources.</p> <p><i>Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities</i></p> <p><i>Enforcement/Monitoring: City of Eastvale</i></p>	<p>LS</p>

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		<i>Planning Department</i>	
Impact 3.8.3 The project would be considered to have a cumulatively considerable impact if approval of the proposed Master Plan could contribute to the cumulative disturbance of cultural resources. This impact would be potentially cumulatively considerable . (Threshold 4)	PCC	See MM 3.8.1 and MM 3.8.3.	LCC
Impact 3.8.4 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to the cumulative disturbance of paleontological resources (i.e., fossils and fossil formations). This would be a potentially cumulatively considerable impact. (Threshold 5)	PCC	See MM 3.8.4.	LCC
Geology and Soils			
Impact 3.9.1 The potential for the project site to be exposed to hazards associated with fault rupture is considered unlikely. Therefore, this impact is considered less than significant . (Threshold 1a).	LS	None required.	LS
Impact 3.9.2 The project site is located in an area that may be subject to strong seismic ground shaking (Threshold 1b). This impact is considered less than significant .	LS	None required.	LS
Impact 3.9.3 The project site include soils that may be subject to seismic-related ground failure, including liquefaction and landslide. This impact is considered less than significant . (Threshold 1c)	LS	None required.	LS
Impact 3.9.4 The project site is located in a region designated as an	LS	None required.	LS

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area of low landslide activity (Threshold 1d). This impact is considered less than significant			
Impact 3.9.5 Grading activities associated with the implementation of the proposed project could expose soil resulting in soil erosion or the loss of topsoil. (Threshold 2)Therefore, impacts are less than significant	LS	None required.	LS
Impact 3.9.6 The proposed project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts are considered less than significant . (Threshold 3)	LS	None required.	LS
Impact 3.9.7 Existing literature and mapping indicate that on site soils are not expected to have high expansion potential (Threshold 4). However, import soils or soils used near finish grade may have a different expansion index than what was tested. As such, impacts associated with this issue area are less than significant .	LS	None required.	LS
Impact 3.9.8 Implementation of the proposed General Plan would result in the conversion of important farmlands, as designated by the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use (Threshold 6). However, based on the City's General Plan, this is considered a less than significant impacts.	LS	None required.	LS
Impact 3.9.9 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably	LCC	None required.	LCC

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foreseeable development in Eastvale, would not contribute to cumulative geologic and soils impacts. (Threshold 7). The proposed project's incremental contribution would be less than cumulatively considerable .			
Impact 3.9.10 Implementation of the proposed Master Plan, along with regional and statewide growth, would result in a contribution to the conversion of important farmland. However, this is a less than cumulatively considerable impact. (Threshold 8)	LCC	None required.	LCC
Hazards and Hazardous Materials			
Impact 3.10.1 Implementation of the proposed project would require the use and transportation of limited amounts of commonly used hazardous materials, including solvents, paints, gasoline, fertilizers, and pesticides, during project construction and operation. Impacts related to upset of these materials would be less than significant . (Threshold 1)	LS	None required.	LS
Impact 3.10.2 Implementation of the proposed project could result in the accidental release of hazardous materials into the environment. Therefore, impacts are considered potentially significant . (Threshold 2)	PS	MM 3.10.2a Asbestos. Prior to the issuance of any permit for the demolition or alteration of existing structure(s), a letter shall be provided to the Planning Department from a qualified asbestos abatement consultant indicating that no asbestos-containing materials (ACM) are present in the building. If ACMs are found to be present, they will need to be abated in	LS

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		<p>compliance with the South Coast Air Quality Management District’s Rule 1403 and all other applicable state and federal rules and regulations.</p> <p>Lead Paint. Prior to issuance of any permit for the demolition or alteration of the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Eastvale Building Safety and Inspection Department. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations.</p> <p>Polychlorinated Biphenyls. Prior to issuance of a demolition permit, a polychlorinated biphenyls (PCB) abatement contractor shall conduct a survey of the project site to identify and assist with compliance with applicable state and federal rules and regulations governing PCB removal and disposal.</p> <p><i>Timing/Implementation: Prior to the issuance of demolition permit</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Building and Planning Departments</i></p> <p>MM 3.10.2b Prior to the issuance of any individual grading permit, a Phase I</p>	

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		<p>Environmental Site Assessment (ESA) shall be conducted to determine the potential for contaminated soil or groundwater on the site. If the Phase I ESA determines that the potential exists for contaminated soil or groundwater on-site, the project applicant shall conduct a Phase II ESA and shall follow its recommendations to remediate any potentially contaminated soil or groundwater. On-site contaminants must be addressed to the satisfaction of either Cal/EPA or the Riverside County Waste Management Department, with their approval of completion of activities/remedial action plans (RAP) submitted to the Eastvale Department of Building and Construction prior to the issuance of a grading permit.</p> <p><i>Timing/Implementation: Prior to issuance of individual grading permit</i></p> <p><i>Enforcement/Monitoring: City of Eastvale Building and Planning Departments</i></p> <p>MM 3.10.2c All trash and debris observed on-site shall be removed prior to construction activities and disposed of at a landfill or approved dumpsite.</p> <p><i>Timing/Implementation: Prior to construction activities</i></p>	

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		<i>Enforcement/Monitoring: City of Eastvale Building and Planning Departments</i>	
Impact 3.10.3 The proposed project would not pose a risk to nearby schools or proposed school facilities. Therefore, impacts are less than significant . (Threshold 3)	LS	None required.	LS
Impact 3.10.4 The project is not located on a site included on a list of hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, no impacts would occur. (Threshold 4)	NI	None required.	NI
Impact 3.10.5 The proposed project site would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant . (Threshold 7)	LS	None required.	LS
Impact 3.10.6 The proposed project would not expose people or structures to a risks associated with wildland fires. A no impact would occur. (Threshold 8)	NI	None required	NI
Impact 3.10.7 Implementation of the proposed project, in addition to cumulative development associated with the proposed project, would not result in cumulative hazardous risk impacts. Therefore, impacts are less than cumulatively considerable .	LCC	None required.	LCC
Hydrology			
Impact 3.11.1 Construction and operation of the proposed project could result in erosion or in degradation of downstream surface water and groundwater resources. However,	LS	None required.	LS

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Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
compliance with the requirements of the SWRCB's Construction General Permit during construction and implementation of best management practices during operations would minimize the potential for such degradation. As such, this impact is considered less than significant . (Thresholds 1 and 5)			
Impact 3.11.2 The proposed project would introduce impervious surfaces in the form of structures and parking lots to previously undeveloped parcels of land. This would result in an incremental reduction in recharge of the local groundwater aquifer. Additionally, due to recently implemented state-wide drought restrictions, However, compliance with JCSD requirements impacts are considered less than significant . (Threshold 2)	LS	None required.	
Impact 3.11.3 Development associated with the proposed project may alter the existing drainage pattern of the site to impact stormwater runoff rates and volumes compared to existing conditions. However, compliance with state and local policies reduce impacts to less than significant . (Thresholds 3 and 4)	LS	None required.	LS
Impact 3.11.4 The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the Santa Ana River watershed, could alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts in the overall watershed. This is considered a less than cumulatively	LCC	None required.	LCC

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

PCC Potentially
Cumulatively
Considerable

ES EXECUTIVE SUMMARY

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
considerable impact. (Threshold 10)			
Population and Housing			
Impact 3.12.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would induce substantial growth or concentration of population the area, either directly or indirectly. This impact is considered less than significant . (Threshold 1)	LS	None required.	LS
Impact 3.12.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would displace substantial numbers of existing housing, necessitating the construction or replacement housing elsewhere. No impact would occur. (Thresholds 2 and 3)	NI	None required.	NI
Impact 3.12.3 The project would be considered to have a cumulatively considerable impact if it would contribute to a cumulative increase in population and housing that would induce substantial growth in Eastvale as well as in the surrounding western Riverside County region. This impact is less than cumulatively considerable .	LCC	None required.	LCC
Public Services and Utilities			
Impact 3.13.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered fire protection or emergency medical facilities, the construction of which could cause	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

PCC Potentially
Cumulatively
Considerable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
significant environmental impacts. This impact would be less than significant . (Threshold 1)			
Impact 3.13.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts. This impact would be less than significant . (Threshold 1)	LS	None required.	LS
Impact 3.13.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered public school facilities, the construction of which could cause significant environmental impacts. This is a less than significant impact. (Threshold 1)	LS	None required.	LS
Impact 3.13.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the deterioration of existing parks and the demand for new parks and recreational facilities, the construction of which could have impacts on the physical environment. This impact would be less than significant . (Threshold 1)	LS	None required.	LS
Impact 3.13.5 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in an increased demand for potable water supplies and increased	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

PCC Potentially
Cumulatively
Considerable

ES EXECUTIVE SUMMARY

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
generation of wastewater, potentially requiring new or expanded facilities provided by the Jurupa Community Services District. This impact would be less than significant . (Threshold 1)			
Impact 3.13.6 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs or if the project would fail to comply with solid waste regulations. This impact would be less than significant . (Thresholds 2 and 3)	LS	None required.	LS
Impact 3.13.7 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered electrical or natural gas facilities, the construction of which could cause significant environmental impacts. This impact would be less than significant . (Threshold 1)	LS	None required.	LS
Impact 3.13.8 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered fire protection and emergency medical facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC

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 PCC Potentially Cumulatively Considerable

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 3.13.9 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered fire protection and emergency medical facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC
Impact 3.13.10 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered public school facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC
Impact 3.13.11 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered park and recreation facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC
Impact 3.13.12 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a	LCC	None required.	LCC

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

PCC Potentially
Cumulatively
Considerable

ES EXECUTIVE SUMMARY

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered water supply and wastewater treatment facilities. This impact would be less than cumulatively considerable . (Threshold 4)			
Impact 3.13.13 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered solid waste facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC
Impact 3.13.14 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered electric and natural gas facilities. This impact would be less than cumulatively considerable . (Threshold 4)	LCC	None required.	LCC

S – Significant

CC- Cumulatively Considerable

LS – Less Than Significant

SU – Significant and Unavoidable

NI No Impact

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LCC -Less than Cumulatively Considerable

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Cumulatively
Considerable

1.0 INTRODUCTION

1.1 PURPOSE OF THE EIR

The City of Eastvale is the lead agency and has prepared this Environmental Impact Report (EIR) to inform the public and responsible/trustee agencies about the anticipated environmental impacts resulting from the adoption and implementation of the Leal Master Plan (the proposed project or the project). The intent of the EIR is to help streamline the development approval process through the identification of environmental impacts and the establishment of mitigation measures that would apply to all future development.

1.2 KNOWN TRUSTEE AND RESPONSIBLE TRUSTEE AGENCIES

For the purpose of the California Environmental Quality Act (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 Wildlife 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 Leal Master Plan or an aspect of the project. The following agencies may have some role in implementing the proposed project and have been identified as potential responsible agencies:

- California Department of Forestry and Fire Protection (Cal Fire)
- California Department of Transportation (Caltrans) District 8, Environmental Planning and Engineering
- Corona-Norco Unified School District
- Jurupa Community Services District
- Santa Ana Regional Water Quality Control Board
- South Coast Air Quality Management District

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):

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

1.0 INTRODUCTION

- 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 project. This EIR will be used to evaluate subsequent projects (public and private) under the Leal Master Plan consistent with CEQA and the State CEQA Guidelines. When further development plans or individual projects/activities under the Master Plan are proposed, the City will be required to examine the proposals 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. If there will be impacts beyond those evaluated in this EIR, the City will need to determine the extent of subsequent environmental analysis.

1.4 INTENDED USES OF THE EIR

This EIR is intended to evaluate the environmental impacts of adoption and implementation of the Leal Master 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.

This 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 summary table of the project's environmental impacts, possible mitigation measures, and identification of alternatives that might reduce or avoid at least one significant environmental impact of the proposed project.

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 project objectives, a description of the staged development process, Permitted Uses and Development Standards, and an overview of the Land Use Program. The Project Description also discusses development assumptions for the project site.

SECTION 3.0 – SUMMARY, MITIGATION, THRESHOLDS, AND ANALYSIS

This section of the EIR contains an analysis of each environmental issue area. Each chapter is organized to provide a brief summary of the environmental determination, a list of the mitigation measures, thresholds of significance, and the environmental analysis.

When addressing potential environmental impacts, the first evaluation will be whether compliance with an existing federal, state, or local law or permit, or a proposed policy in the Leal Master Plan, will fully address the impact. Only if there is no existing requirement that would address the potential impact will a mitigation measure be proposed. The approach to mitigation consists of an inventory of mitigation measures that will apply to every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process (Leal Master Plan Mitigation Program).

SECTION 4.0 – CUMULATIVE IMPACTS

This section summarizes all identified cumulative impacts associated with the proposed project drawing from the cumulative analysis provided in each subsection. 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

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project that 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

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.

1.0 INTRODUCTION

1.6 ENVIRONMENTAL REVIEW PROCESS

NOTICE OF PREPARATION

In accordance with Section 15082 of the state CEQA Guidelines, the City prepared a Notice of Preparation of an EIR for the project on March 9, 2015. The City was identified as the lead agency for the proposed project. This notice was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed project. A scoping meeting was held on March 18, 2015, to receive comments. **Table 1.0-1** lists the eight written comments received during the public review period for the NOP.

**TABLE 1.0-1
COMMENT LETTERS**

Agency	Contact	Received	Comment Topic
State of CA, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit	-	March 17, 2015	NOP Document Transmittal
South Coast Air Quality Management District	Jillian Wong, Ph.D., Program Supervisor	March 17, 2015	Air quality analysis
Santa Ana Watershed Project Authority	Celeste Cantu, General Manager	March 24, 2015	Inland Empire Brine Line near project boundary
Riverside County Waste Management Department	Jose Merlan, Urban/Regional Planner II	March 24, 2015	Solid waste impacts
State of CA, Natural Resources Agency, Department of Fish and Wildlife	Leslie MacNair, Acting Regional Manager	April 6, 2015	Biological resources and impacts, CA Endangered Species Act
San Bernardino County Department of Public Works	Nidham Aram Alrayes, MSCE, P.E., QSD/P	April 14, 2015	Cumulative impacts
City of Ontario	Scott Murphy, AICP, Planning Director	April 14, 2015	Traffic analysis, intersection analysis, fair share mitigation for widening Archibald Ave crossing
Soboba Band of Luiseno Indians	Joseph Ontiveros, Soboba Cultural Resources Department	May 21, 2015	Native American consultation

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.EastvaleCA.gov.

Comments will also be accepted via an online comment form at the website listed below from July 2 through August 17, 2015. 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@EastvaleCA.gov

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) and will contain any minor edits made to the Draft EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

As the final decision-maker regarding the Leal Master 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 project by the Planning Commission, the City Council may take action to adopt, revise, or reject the Leal Master 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 Master Plan's relationship to alternatives considered in this EIR.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT OBJECTIVES

The Leal Master Plan envisions development of the project site as the city's town center and a destination in the region, anchored by a "lifestyle" retail center as described in the Master Plan and including a mix of complementary office, civic, hotel, residential, and recreation and entertainment uses. The project's objectives are to:

1. Facilitate transformation of the project area into Eastvale's town center.
2. Encourage a mix of uses, including retail, office, civic, hotel, residential, and recreation/entertainment, that respond to market demand.
3. Create a large, regional "lifestyle retail" destination in Eastvale to meet the needs of patrons from the community and the region.
4. Implement high-quality architecture and design that creates a sense of place and enhances the aesthetic and visual quality of the neighborhood.
5. Design the site in an efficient fashion that perpetuates a compact, urban form of development.
6. Provide safe and entertaining gathering places for Eastvale residents.
7. Develop the site in an orderly, comprehensive, and cohesive manner that avoids the piecemeal development of the site with a mix of incompatible uses that do not relate to one another.
8. Expand the city's economic base by generating substantial property and sales tax revenue.
9. Develop a comprehensive mitigation plan that streamlines subsequent project approval allowing for efficient consideration of development proposals.

2.2 PROPOSED PROJECT

The proposed project consists of adoption of the Leal Master Plan, a long-range planning document that identifies the general parameters for future development of the 161-acre Leal property (project site) located in the northeastern section of Eastvale. The overall approach to planning for development of the project site, including the envisioned level of quality, expected project characteristics, allowed land uses, etc., is discussed in the Master Plan, which is included in its entirety as **Appendix 2.0-1** to this Draft EIR. The key components of the proposed project are summarized below; however, the reader is referred to **Appendix 2.0-1** for the full text of these components.

STAGED DEVELOPMENT PROCESS

The proposed Master Plan represents the first stage in a multistage planning/development process (Staged Development Process) that is detailed in Chapter 5, Development Process, of the Leal Master Plan and summarized below. The goal of the Leal Master Plan is to establish specific parameters for the design and quality of future development of the project site, while still allowing flexibility in the design and implementation of that development. To achieve this

2.0 PROJECT DESCRIPTION

goal, the Staged Development Process allows prospective developers to respond to market demand by proposing design guidelines and to select development standards at the time of development-specific project conception as opposed to the City establishing strict requirements prior to any development being proposed for the project site.

Stage 1 – Adoption of the Leal Master Plan (Proposed Project)

The proposed Leal Master Plan identifies the project objectives and specific parameters for the design and quality of overall future development of the project site. In addition, the Leal Master Plan establishes permitted and conditionally permitted uses and outlines the staged development review process. At this stage, the Master Plan allows for a wide range of land use types, densities, and intensities. Subsequent stages will likely result in development that is less intensive than the maximum permitted in the Master Plan.

Stage 2 – Development Standards and Guidelines/Project and Infrastructure Plans

Stage 2 of the Development Process will focus on preparing project-wide development criteria and guidelines that are not included in the Master Plan, creating detailed plans for the first phase(s) of development based on the criteria and guidelines included in the Master Plan. Stage 2 will also include overall land use, circulation, and infrastructure plans.

All Stage 2 components would be required to demonstrate consistency with the project vision contained in Chapter 2, Project Character, of the Master Plan, as well as the development standards in Chapter 4, Development Standards, and any phasing requirements in Chapter 6, Implementation Plan, of the Master Plan.

Stage 3 – Development Plan Review

Stage 3 will consist of the submittal of specific development projects through the Development Plan Review process established in the Eastvale Zoning Code.

PERMITTED USES AND DEVELOPMENT STANDARDS

The Leal Master Plan establishes permitted uses and development standards for the project site, as well as prohibited uses. **Table 2.0-1** describes the land use districts established by the Master Plan. The range of development/buildout potential for each of these land use districts is described under the Land Use Program subheading below and in **Table 2.0-2**.

**TABLE 2.0-1
LAND USE DISTRICTS**

Land Use District	Permitted Uses	Conditionally Permitted Uses
<p>Lifestyle Center (LC) – Accommodates a mix of pedestrian-oriented retail, office, and residential uses with a prominent open space network of landscaped streets, paseos, promenades, and public space that forms a central community gathering place.</p>	<ul style="list-style-type: none"> Retail Sales and Services, Large and Small Scale Kiosks, Vendor Carts, Vending Machines Restaurants and other eating establishments, including outdoor dining Theaters, Theatrical, Musical Performances 	<ul style="list-style-type: none"> Personal Service Establishments, including day spas, therapeutic massage, etc. Governmental Uses, including police and fire facilities, etc. Live-Work Units

2.0 PROJECT DESCRIPTION

Land Use District	Permitted Uses	Conditionally Permitted Uses
	<ul style="list-style-type: none"> • Hotels • Professional Offices (e.g., real estate office, architects, insurance) – must be above the ground floor • Residential Units – must be above the ground floor 	
<p>General Commercial (GC) – Allows a mix of retail and office uses that may include neighborhood and regional retail stores, restaurants, entertainment, hotels, civic center, and small-scale professional offices.</p>	<ul style="list-style-type: none"> • Kiosks, Vendor Carts, Vending Machines • Outdoor Dining • Residential Units – must be above the ground floor 	<ul style="list-style-type: none"> • Automobile Service and Repair • Governmental Uses, including police and fire facilities, etc. • Caretaker Units • Live-Work Units
<p>Commercial Office (CO) – Accommodates large-scale professional offices such as a medical office building, hospital, and flexible space for design studio and other similar uses. Some limited retail and service uses are allowed.</p>	<ul style="list-style-type: none"> • Clinics, including Medical, Dental, Chiropractic • Residential Condominiums – must be above the ground floor 	<ul style="list-style-type: none"> • Outdoor Dining • Animal Hospitals
<p>Residential Medium (RM) – Allows medium-density residential housing types such as townhouses and condominiums.</p>	<p>Density in this land use area ranges from 14 to 21 dwelling units per acre. Permitted and conditionally permitted uses in the RM land use district are the same as those in the General Residential (R-3) zone of the Eastvale Zoning Code.</p>	
<p>Residential High (RH) – Typical housing types in this zone are townhouses, condominiums, and apartments.</p>	<p>Allows high-density residential housing ranging from 22 to 40 dwelling units per acre. Permitted and conditionally permitted uses in the RH land use district are the same as those in the General Residential (R-3) zone of the Eastvale Zoning Code.</p>	
<p>Civic Center (CC) – Allows for a potential future city hall and other public facilities, such as a library, community center, or public park. Ancillary uses such as retail, professional office, and eating establishments are permitted in this land use district.</p>	<ul style="list-style-type: none"> • Governmental Uses, including police and fire facilities, etc. • Community Center • Kiosks, Vendor Carts, Vending Machines • Outdoor Dining • Restaurants and other eating establishments • Professional Offices (e.g., real estate office, architects, insurance) 	

Source: Eastvale 2015, Chapter 4

While more specific standards and design criteria will be provided in Stage 2 of the Development Process, the proposed Master Plan includes framework standards that will apply to future stages of planning and development. For example, Chapter 4, Development Standards, of the Master Plan specifies that a signature fountain is to be installed at the major corner of Limonite Avenue and Hamner Avenue, with specific design to be submitted in Stage 2. Development standards in the Master Plan specify project-wide standards for pedestrian and bicycle access, parking design, building height, setback, mass, form, and placement, street landscape treatment, and signage.

2.0 PROJECT DESCRIPTION

LAND USE PROGRAM

Table 2.0-2 identifies the land uses allowed in the land use program for the Leal Master Plan, along with details regarding the expected types of developments to occur within each land use type (and in some cases, maximum and/or minimum amounts of development) as identified in Chapter 3, Land Use Program, of the Master Plan.

The focus of the Master Plan is to provide basic land use approval for development of the types of land uses within the ranges shown in **Table 2.0-2** and to guide the more detailed planning that will take place in subsequent stages (as defined in the Master Plan). As a result, a land use map specifying locations for these uses has not been developed for the proposed Leal Master Plan; the land use mix and layout will not be fully defined until Stage 2 of the Development Process as described in the Master Plan and summarized below.

**TABLE 2.0-2
BUILDOUT RANGE***

Land Use Type	Minimum/Maximum Range
Lifestyle Center	325,000 to 1,300,000 square feet
General Commercial	Maximum of 225,000 square feet
Commercial Office	Maximum of 920,000 square feet
Hotel	Maximum of 450 rooms
Civic Center	No minimum/maximum
Medium Density Residential	No minimum/maximum
High Density Residential	500 to 660 dwelling units
Other Community Features	To be provided as part of the development of the project

Source: Eastvale 2015, Chapter 3

*Not all maximum land use categories can be accommodated on the project site, assuming that development of the site takes place consistent with other, similar projects in the vicinity (e.g., primarily single-story buildings with limited structured parking). The detailed land use map required to be submitted as part of the Staged Development Process described in Chapter 5 of the Master Plan will identify the specific maximums in each category which will be developed.

2.3 DEVELOPMENT POTENTIAL

The proposed project allows for the future development of commercial, office, hotel, civic, and residential uses on land that is currently designated in the General Plan for residential and business park uses and zoned for agricultural uses. As described above, the specific mix of land uses that will be developed on the project site will not be fully defined until implementation of Stages 2 and 3 of the Staged Development Process in order to provide an opportunity for development of the site based on optimal market conditions. The Master Plan currently identifies only the types of land uses that may occur on the project site, along with the maximum and/or minimum amounts of development (**Table 2.0-2**). Because the proposed Master Plan allows a range of development potential and the ultimate allocation of uses will depend on market conditions and timing, any specific development projections associated with buildout of the proposed project would be speculative at this time.

For the purposes of the environmental analysis in this Draft EIR, a “maximum-case” assumption based on buildout of land uses on the higher end of the ranges identified in **Table 2.0-2** was used to determine environmental impacts. The “maximum-case” assumptions are shown in **Table 2.0-3**.

**TABLE 2.0-3
MAXIMUM CASE BUILDOUT ASSUMPTIONS**

Land Use
660 multi-family homes (apartments)
1,525,000 square feet of general retail (shopping center)
460,000 square feet of general office
460,000 square feet of medical office
450 hotel rooms
100,000-square-foot civic center

The maximum-case assumption is used to allow the maximum amount of future development potential for the property. While the full range of uses shown in **Table 2.0-3** could theoretically be developed, the resulting project would require buildings of several stories in height, stacked parking, and a density that would be unique in Eastvale and in all but the most urban areas of Riverside County. Given past and current market trends, along with site constraints, it is unlikely that the maximum case buildout would occur on the project site.

The project site is 161 acres. In order to achieve the density and intensity of the maximum-case buildout assumption within that acreage, the land uses would be required to be stacked vertically (i.e., “high-rise” development). Land uses in Eastvale and the surrounding area are generally not urban high-rise-type developments. One- to two-story single-family homes and low-rise multi-family residences are customary; over 90 percent of the homes in the city, and 75 percent of the homes in Riverside County, are single-family residences (Eastvale 2013, p. A-28).

Furthermore, as discussed in the City’s Housing Needs Assessment (Appendix to the 2013–2021 Housing Element, adopted June 2013), land costs are a larger concern than density in Eastvale and the surrounding Inland Empire area. Based on cost information from private real estate developers building apartment projects in the region, development costs can increase significantly as residential density increases. Therefore, land and development costs make it unlikely that the full range of allowed residential density would be developed on the project site.

Because there is no regulatory limitation on the size and scale of development in the Master Plan or the City’s General Plan, the maximum-case scenario was evaluated in the Draft EIR to provide the most flexibility for future (Stages 2 and 3) development proposals. A lower intensity buildout scenario (Market Probable Scenario) is analyzed in Section 5.0, Alternatives, of this Draft EIR.

2.0 PROJECT DESCRIPTION

REFERENCES

Eastvale, City of. 2013. *City of Eastvale 2013-2021 Housing Element. Appendix – Housing Needs Assessment.*

———. 2015. *Leal Master Plan, Public Review Draft.*

2.1.1 EXISTING SETTING

This section describes existing conditions at the project site and in the vicinity in the following categories:

- [Land Use and Land Use Policy](#) (Page 2.1-1)
- [Transportation](#) (Page 2.1-2)
- [Air Quality](#) (Page 2.1-8)
- [Aesthetic Character](#) (Page 2.1-10)
- [Noise](#) (Page 2.1-15)
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LAND USE AND LAND USE POLICY

Existing Land Uses

As of 2015, the project site included one of the city's last operating dairies, the Leal family home, and a horse farm.

The site is bounded by 58th Street to the north, Hamner Avenue to the east, Limonite Avenue to the south, and Scholar Way to the west and is situated immediately west and north of existing commercial and retail developments and south and east of established and newly developed residential neighborhoods of varying densities. The project site is located approximately half a mile west of Interstate 15 (I-15). The project location is shown in **Figure 2.1-1** and **Figure 2.1-2**.

Land Use Policy

The project site is identified in the Eastvale General Plan as representing "a significant development opportunity" to accommodate future growth in the city. General Plan Policy LU-19 calls for a mixed-use project with office, civic, hotel, multi-family residential, and recreation and entertainment land uses on the site.

Policy LU-19: Leal Property – In this area, the City supports the development of a mixed-use project in cooperation with the property owner/developer. Potential uses to be considered include:

- Retail
- Office
- Civic
- Hotel

2.1 EXISTING SETTING

- Multi-family residential
- Recreation/Entertainment

Actual planned land uses will be determined at a future date.

TRANSPORTATION

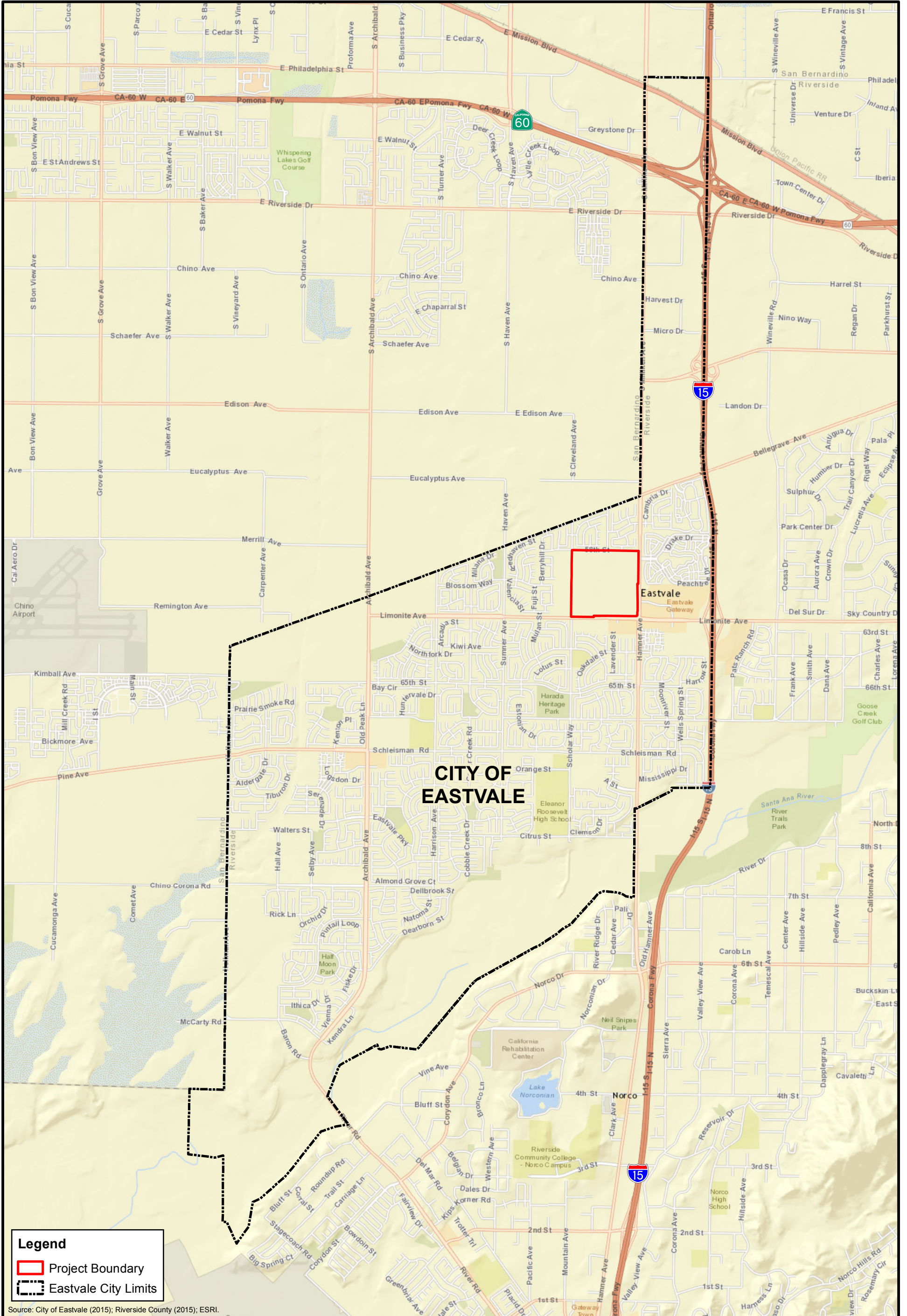
Automobiles are the primary mode of travel in Eastvale and the region, with limited bus transit service and bicycle and pedestrian facilities in the immediate vicinity of the project site. Existing transportation facilities are described below.¹

Existing Roadway Network

Regional access to the project site is provided by I-15 and State Route (SR) 60. Access to the project site from I-15 is provided by the interchange with Cantu-Galleano Ranch Road and by the interchange at Limonite Avenue. SR 60 provides access to the project site through the I-15 interchange and Hamner Avenue. Local access to the project site is provided by Cleveland Avenue/Scholar Way to the west of the project site, Limonite Avenue to the south, and Hamner Avenue to the east. See **Figure 2.1-1** for the existing roadway network in the project area. A brief description of the key roadway facilities in the vicinity of the proposed project is provided below (Fehr & Peers 2015, pp. 18–20).

- I-15 is the main north–south facility through Riverside County. It extends across Riverside County from its southern border with San Diego County to its northern border with San Bernardino County. I-15 is a six-lane divided freeway from the San Diego County line to the San Bernardino County line. Interchanges on I-15 in vicinity of Eastvale are provided at 2nd and 6th streets in Norco, Limonite Avenue, Cantu-Galleano Ranch Road, and SR 60.
- SR 60 is a major east–west 10-lane divided freeway that intersects I-15 in the northern portion of Eastvale. Interchanges near the project site include Archibald Avenue, Haven Avenue, the I-15 interchange, and Mission Boulevard.
- Hamner Avenue is a major thoroughfare running north–south through the city. Hamner (as of mid-2015) is a four-lane roadway throughout most of the city, with two-lane sections in some areas and as many as six lanes plus turn lanes in others. Hamner provides direct access to the project site. Adjacent to the project site, Hamner Avenue (as of mid-2015) has two lanes of northbound traffic and one lane of southbound traffic.
- Cleveland Avenue/Scholar Way is a four-lane roadway running from Citrus Street to Bellegrave Avenue. The roadway is designated as Cleveland Avenue north of Limonite and Scholar Way south of Limonite in the city. It provides direct access to the project site.
- Limonite Avenue is a major thoroughfare in Eastvale running in the east–west direction. Limonite allows two to three lanes in each direction in various parts of the city. Limonite Avenue provides direct access to the project site.
- 58th Street is a two-lane roadway running in the east–west direction and bordering the project site to the north.

¹ For additional information on circulation, please see Section 3.2, Transportation and Traffic, of this Draft EIR.



CITY OF EASTVALE

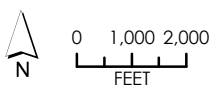


Figure 2.1-1
Project Location
Michael Baker
INTERNATIONAL

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Figure 2.1-2
Project Site

2.1 EXISTING SETTING

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Air Traffic

The closest airport to the project site is Chino Airport, which is a general aviation airport owned and operated by the County of San Bernardino. The airport is located in 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 mid-2015, there are 503 aircraft based at the airport: 399 single-engine airplanes, 60 multi-engine airplanes, 20 jet airplanes, 23 helicopters, and 1 glider.

Chino Airport averages 451 aircraft operations per day (for the 12-month period ending July 31, 2014), with 62 percent local general aviation, 37 percent transient general aviation, and less than 1 percent air taxi. The project site is not located within the Airport Influence Area Boundary for Chino Airport².

Public Transit

Public transportation in Eastvale is provided by the Riverside Transit Agency (RTA), which offers both fixed-route and dial-a-ride service. RTA currently operates two fixed routes in the city: Route 3 and Route 29.

Route 3 operates seven days a week with weekday headways of 30 minutes and weekend headways of one hour, providing access to the project site with stops at Hamner and Swan Lake Estates and at Limonite and Hamner.

Route 29 operates seven days a week with one-hour headways, providing access to the project site with stops at Limonite and Hamner.

Rail

Rail service in Riverside County is provided by Metrolink. There are no Metrolink rail lines or stations in Eastvale. However, Metrolink's Riverside Line runs through nearby Jurupa Valley, providing riders in Eastvale access to a station at 6001 Pedley Road, near Limonite Avenue.

Bicycle Travel

Eastvale does not currently have an extensive bike facilities and there are currently no bike lanes serving the project site.

A Bicycle Master Plan is currently being drafted by the City but has not yet been adopted. The draft plan proposes bike facilities (cycle track) along the southern and eastern border of the project site, along Limonite Avenue and Hamner Avenue. The plan also proposes bike facilities (bicycle boulevard) along the western and northern borders of the project site, along Scholar Avenue and 58th Street (Eastvale 2015).

² The City's General Plan Land Use map incorrectly identifies the western half of the project site as being within the Airport Influence Area Boundary for Chino Airport.

2.1 EXISTING SETTING

AIR QUALITY

South Coast Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. Eastvale is 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). Clouds and fog that form along the coast infrequently extend as far inland as the Temecula Valley and usually burn off quickly after sunrise.

Rainfall in Eastvale is typically greatest during the winter season from December through February. Average temperatures are typically highest during August and lowest during December.

In conjunction with wind patterns that affect the rate and orientation of horizontal pollutant transport, 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 Eastvale (SCAQMD 1993).

Air Pollutants

The emission of air pollutants by stationary and mobile sources is regulated by federal and state law. 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. Primary air pollutants consist of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), sulfur dioxide (SO₂), most particulate matter (PM₁₀ and PM_{2.5}), lead, and fugitive dust.

Of these, CO, SO₂, PM₁₀, 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 (O₃) and nitrogen dioxide (NO₂) are the principal secondary criteria pollutants.

Table 2.1-1 provides a description of each of the primary and secondary criteria air pollutants and their known health effects.

TABLE 2.1-1
CRITERIA AIR POLLUTANTS: COMMON SOURCES AND EFFECTS

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between volatile organic compounds (VOC) and nitrous oxides (NO _x) in the presence of sunlight. VOCs are also commonly referred to as reactive organic gases (ROGs). Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Particulate Matter (PM ₁₀ & PM _{2.5})	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned; when gasoline is extracted from oil; or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2011

Existing air pollutant concentrations in the Eastvale area are summarized in **Appendix 3.3-C**.

Climate Change

Since the early 1990s, scientific consensus holds that the world’s population is releasing greenhouse gases (GHGs) 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 (CO₂), methane (CH₄), and nitrous oxide (N₂O), 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 a warming of the earth and has the potential to severely impact the earth’s climate system.

2.1 EXISTING SETTING

Table 2.1-2 provides descriptions of the primary GHGs attributed to global climate change.

**TABLE 2.1-2
GREENHOUSE GASES**

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ 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 CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
Methane (CH ₄)	Methane is a colorless, odorless gas and 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 CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about 12 years. ²
Nitrous Oxide (N ₂ O)	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. Nitrous oxide 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 ₂ O is approximately 120 years. ³

Sources: ¹ EPA 2011a, ² EPA 2011b, ³ EPA 2010

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. CH₄ traps over 21 times more heat per molecule than CO₂, and N₂O absorbs 310 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to approximate the effect that would occur if only CO₂ were being emitted.

AESTHETIC CHARACTER

Although the surrounding Chino Valley contains views of agriculture, including dairies, ranches, and row crops, the aesthetic character of Eastvale is that of a suburban community with housing and commercial and retail development typical of the early twenty-first century. The project site itself contains a dairy that dates to the 1970s but is surrounded by newer suburban development. Photographs of the project site and surrounding area are included in **Figure 2.1-3**.

One major aesthetic resource identified in the Eastvale General Plan, the Santa Ana River, is located approximately 2 miles south of the project site and is not visible from the project site.



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NOISE

Eastvale has a relatively quiet noise environment. The primary noise sources in Eastvale are transportation-related; noise affecting the city is primarily from motor vehicle noise on local roads and I-15. Other noise sources include stationary noise emitters such as motors, appliances, air conditioners, lawn and garden equipment, power tools, and generators that are commonly found in residential neighborhoods.

Two retail shopping complexes located to the south and to the east of the project site contribute noise typical of commercial development, including parking lot activities (e.g., opening and closing of vehicle doors, people talking) and noise generated by mechanical building equipment (e.g., heating, ventilation, and air conditioning [HVAC] systems).

According to the City's General Plan, while aircraft approaching and departing from Chino Airport are audible in Eastvale, airport noise is transient and not considered a major noise source except during the late evening and morning hours. According to the most recently adopted version of the Riverside County Airport Land Use Compatibility Plan (ALUCP) for Chino Airport (RCALUC 2008), only about 10 percent of flights at Chino Airport occur between 7:00 p.m. and 7:00 a.m. Helicopters operating from Chino Airport are also potential sources of noise, but because of the relatively low frequency and short duration of their operation in most circumstances, these operations do not significantly affect average noise levels in the city.

BIOLOGICAL RESOURCES

Physical and Biological Setting

The project site is associated with the Chino Valley, situated between the Chino Hills to the west and the Jurupa Hills to the east. The project site is relatively flat with no notable topographical features besides several man-made depressions and soil mounds. The site slopes slightly from north to south, ranging in elevation from 657 to 687 feet above mean sea level. The project site is underlain by both Hilmar and Delhi soil series. The majority of the project site is associated with the Hilmar soil series, which is a moderately well drained soil typically found on alluvial fans. The southeast corner of the project site is underlain by the Delhi soil series, which is a somewhat excessively drained soil associated with alluvial fans and dunes.

Based on the habitat accounts in Volume 2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (County of Riverside 2003), the project site is entirely agricultural land and is entirely devoid of natural plant communities. As such, the project site supports primarily nonnative, weedy vegetation. Dairy and livestock feed yards typically support a mix of perennial grasses and legumes. A row of large trees bisects the project site from north to south, and a drainage ditch bounds the southern edge of the property.

Western Riverside MSHCP

The proposed project site is located within the Eastvale Area Plan of the Western Riverside County MSHCP planning area. The MSHCP formally determines conservation planning for all of western Riverside County. The MSHCP identifies plants, wildlife, and habitat that need to be preserved or protected. It also outlines procedures for mitigation of future land development and determines under what circumstances an "incidental take" can be permitted.

2.1 EXISTING SETTING

Sensitive Habitats and Jurisdictional Features

Sensitive habitats include areas of special concern to resource agencies, areas protected under the California Environmental Quality Act (CEQA), areas designated as sensitive natural communities by the California Department of Fish and Wildlife (CDFW), areas outlined in Section 1600 of the California Fish and Game Code, areas regulated under Section 404 of the Clean Water Act (CWA), areas protected under Section 401 of the CWA, and areas protected under local regulations and policies.

Jurisdictional waters of the State and United States, along with isolated wetlands, provide a variety of functions for plants and wildlife. Wetlands and other water features provide habitat, foraging, cover, and migration and movement corridors for both special-status and common species. In addition to habitat functions, these features provide physical conveyance of surface water flows capable of handling large stormwater events. Large storms can produce extreme flows that cause bank cutting and sedimentation of open waters and streams. Jurisdictional waters can slow these flows and lessen the effects of these large storm events, protecting habitat and other resources.

No jurisdictional delineation has been conducted on the project site yet; however, a review of aerial photography revealed areas that could potentially be considered jurisdictional waters. Specifically, a review of historical aerials revealed several small seasonal wetland features in the center portion of the project site. In addition, a linear ditch feature appears to occur along the southwestern edge of the site.

Wildlife Corridors

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another

The MSHCP Conservation Area comprises a variety of existing and proposed cores and linkages. A linkage is defined by the MSHCP as a connection between core areas with adequate size, configuration, and vegetation characteristics to provide for live-in habitat or genetic flow for planning species. The project site is not in or adjacent to any designated cores or linkages. Furthermore, the entire project site has been disturbed by development and agricultural uses and is unlikely to facilitate local wildlife movement. As shown in **Figure 2.1-2**, the project site is surrounded by dense urban development, further impairing wildlife movement. Available data on movement corridors and linkages was accessed via the CDFW BIOS 5 Viewer (2015). Data reviewed included the Essential Connectivity Areas [ds623] layer and the Missing Linkages in California [ds420] layer. The project site does not overlap an Essential Connectivity Area, nor does it overlap a Missing Linkages layer.

Special-Status Species

Preliminary wildlife database searches and a review of the project site resulted in the determination that the project site has the potential to support special-status species. **Appendix 3.7** provides a summary of all special-status species identified in the database results. All special-status species returned from the database queries are analyzed in the table, which provides a description of the habitat requirements for each species and conclusions regarding the potential for each species to be impacted by project components. The California Natural Diversity Database (CNDDDB) results within 1 mile of the project site are depicted on **Figure 2.1-4**. Please refer to Section 3.7, Biological Resources, for further discussion of special-status species.

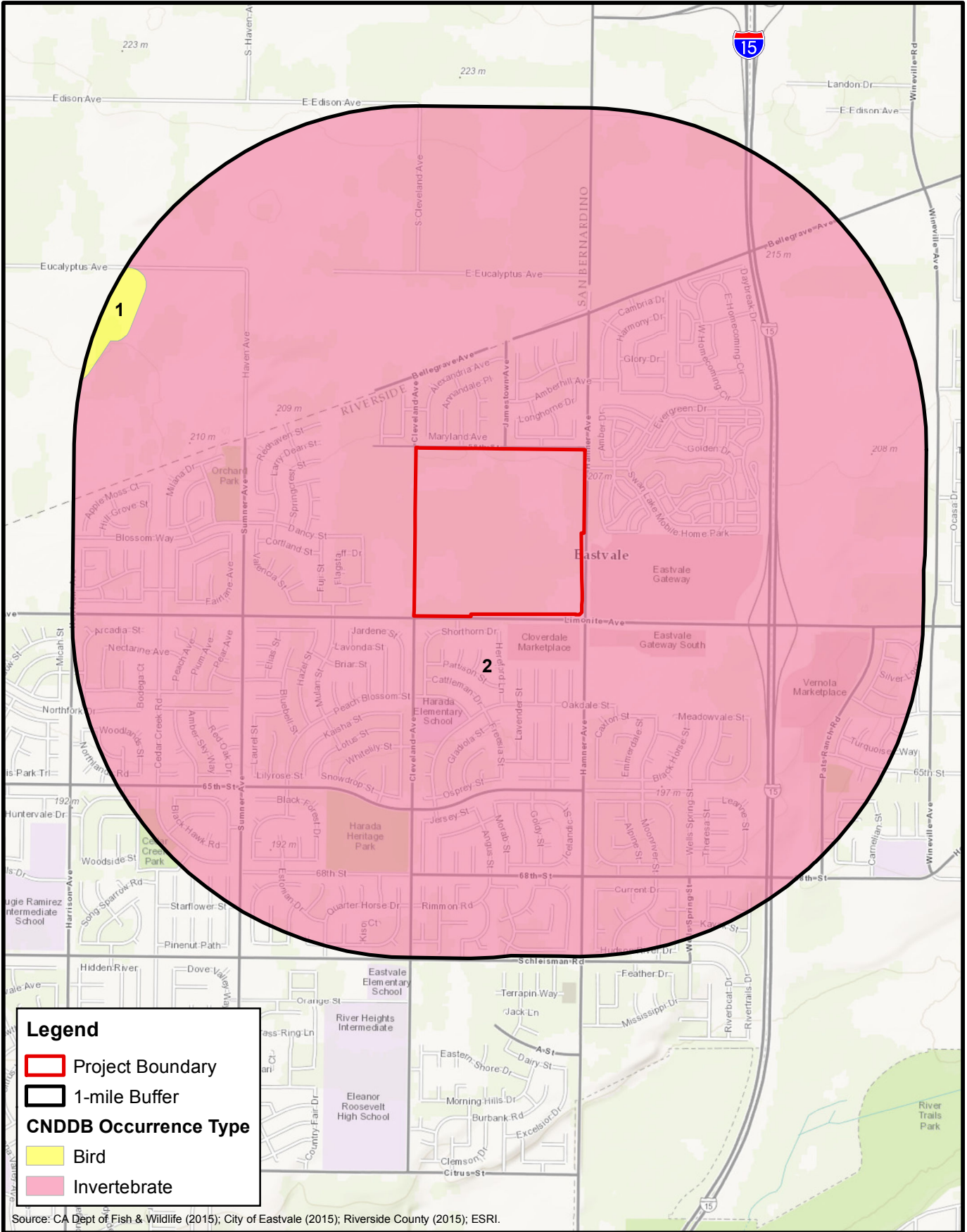


Figure 2.1-4
CNDDB Occurrences of Special-Status Species
Within 1 Mile of Project Site

2.1 EXISTING SETTING

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CULTURAL RESOURCES

Present-day Eastvale lies near the borders between the traditional territories of three Native American groups: the Serrano of the San Bernardino Mountains, the Luiseño of the Perris-Elsinore region, and the Gabrielino of the San Gabriel Valley. A late influx of Cahuilla also occurred during the nineteenth century.

Whatever the linguistic affiliation, Native Americans in the Riverside-Eastvale area exhibited similar social organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/base sites are marked by midden deposits, often with bedrock mortar features. During their seasonal rounds to exploit plant resources, small groups often ranged some distances in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, such as grinding slicks on bedrock boulders at the locations of the resources.

The Master Plan area has been occupied as a dairy and home site for approximately 40 years. The land has been graded in support of dairy activity and construction of the existing improvements. Because of the grading and construction on the site, there are no visible historic or cultural resources present.

Based on the Map My County application for the County of Riverside (2015), the entire project site is located in an area of high paleontological sensitivity, identified as High B (Hb). This sensitivity rating is based on potential occurrence of fossils at a specific depth below the surface in soils that are known to contain or have the correct age and depositional conditions to contain significant paleontological resources. "Hb" indicates that fossils are likely to be encountered at or below 4 feet of depth and may therefore be impacted during site excavation and grading.

2.1 EXISTING SETTING

GEOLOGY AND SOILS

Geologic Setting

Eastvale is located within the Chino Basin in the northern portion of the Peninsular Ranges Geomorphic Province of California, which is characterized by steep, elongated valleys that trend west to northwest and major structural features, including the Cucamonga fault and the San Gabriel Mountains to the north, the Chino fault, the Puente Hills, and the Chino Hills to the southwest, and the San Jacinto fault to the east.

Soils

Specific soil types found in the City of Eastvale, as characterized by the US Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS), are listed in **Table 2.1-3**. As shown, the most prominent soil types are Delhi loamy fine sand, Hilmar loamy sand, and Hilmar loamy very fine sand.

**TABLE 2.1-3
SOIL TYPES FOR LEAL PROPERTY**

Map Unit Symbol	Map Unit Name	Acres in Project Site	Percentage of Acres
DbA	Delhi loamy fine sand, 0 to 2 percent slopes Permeability: Rapid permeability Drainage: Somewhat excessively drained Clay percentage: 4 percent Sand percentage: 88.1 percent Soil rating: ¹ Grade 2 (Good) Farmland classification: ² Prime farmland, if irrigated	15.0	9.3
HhA2	Hilmar loamy sand, 0 to 2 percent slopes Permeability: Rapid permeability Drainage: Moderately well drained Clay percentage: 10 percent Sand percentage: 42.7 percent Soil Rating: Grade 3 (Fair) Farmland Classification: Prime farmland, if irrigated	19.5	12.1
HIA	Hilmar loamy very fine sand, 0 to 2 percent slopes Permeability: Rapid permeability Drainage: Moderately well drained Clay percentage: 5 percent Sand percentage: 78.6 percent Soil Rating: Grade 2 (Good) Farmland Classification: Prime farmland, if irrigated	127.2	78.6
Total		161.7	100.0%

Source: USDA-NRCS 2015b

1. Soil rating is determined based on map unit description from the NRCS for soils in the Riverside County, Coachella Valley Area (CA680) and Storie Index Soil Rating. Soil grading categories are as follows: Grade 1 (excellent) – soils that rate between 80 and 100 percent and which are suitable for a wide range of crops, including alfalfa, orchard, truck, and field crops; Grade 2 (good) – soils that rate between 60 and 79 percent and which are suitable for most crops, yields are generally good to excellent; Grade 3 (fair) – soils that rate between 40 and 59 percent and which are generally of fair quality with less wide range of suitability than grades 1 and 2; soils in this grade may give good results with certain specialized crops; Grade 4 (poor) – soils that rate between 20 and 39 percent and which have a narrow range in their agricultural possibilities; for example, few soils in this grade may be good for rice, but not good for many other uses; Grade 5 (very poor) – soils that rate between 10 and 19 percent are of very limited use except for pasture because of adverse conditions such as shallowness, roughness, and alkali content; Grade 6 (nonagricultural) – soils that rate less than 10 percent include, for example, tidelands, riverwash, soils of high alkali content, and steep broken land.
2. Farmland Classification in this table is based on NRCS map unit description for each soil type. These are not designations assigned by the Department of Conservation Farmland Mapping and Monitoring Program.

Subsidence and Collapsible and Expansive Soils

Soil permeability is the property of the soil to transmit water and air. The more permeable the soil, the greater the seepage (FAO 2013), resulting in higher rates of infiltration. Soils that transmit water faster (such as sandy soils) and have higher permeability will have less shrink-swell potential because less water retention occurs with these types of soils. Conversely, soils that transmit water at a slower rate (such as soils with high clay content) have lower permeability and therefore higher shrink-swell potential and the potential for significant expansion. When structures are located on expansive soils, foundations have the tendency to rise during the wet season and shrink during the dry season. This movement can create new stresses on various sections of the foundation and connected utilities and can lead to structural failure and damage to infrastructure.

Existing literature and mapping indicate that soils on the project site have low shrink-swell potential because they are generally sandy and have a low percentage of clay. Additionally, as shown in **Tables 2.1-3** and **2.1-4**, primary soil types found on-site have relatively rapid permeability rates due to low clay content. Based on these factors, on-site soils are not expected to have high expansion potential.

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. It may be caused by a variety of human and natural activities, including earthquakes. According to Map My County (2015), the project site is located in a susceptible subsidence zone.

**TABLE 2.1-4
SOIL PERMEABILITY RATE**

Permeability Class	Soil Texture	Inches per Hour	Permeability ¹	
Very Slow	Clay	<0.06	Low	From very slow (clay) to very rapid (sand)
Slow	Silty Clay	0.06–0.20		
Moderately Slow		0.2–0.60	Moderate	
Moderate	Loam	0.6–2.0		
Moderately Rapid	Sandy Loam	2.0–6.0		
Rapid		6.0–20	High	
Very Rapid	Sand	> 20		

Source: FAO 2013

1. Low soil permeability is the inability for soil to move water or air rapidly through. Conversely, high soil permeability is the ability for soil to move water or air rapidly through. Low permeability is equivalent to high clay content and thus, high shrink-swell potential. High permeability is equivalent to high sand content and thus low shrink-swell potential.

FAULTING AND SEISMICITY

Ground Shaking

The strength of an earthquake is generally expressed in two ways: magnitude and intensity. The magnitude is a measure that depends on the seismic energy radiated by the earthquake as recorded on seismographs. The intensity at a specific location is a measure that depends on the effects of the earthquake on people or buildings and is used to express the severity of ground shaking.

2.1 EXISTING SETTING

The most commonly used scale to measure earthquake intensities (ground shaking and damage) is the Modified Mercalli Intensity Scale, which measures the intensity of an earthquake's effects in a given locality and is based on observations of earthquake effects at specific places. On the Modified Mercalli Intensity Scale, values range from I to XII (see **Table 2.1-5**). While an earthquake has only one magnitude, it can have various intensities, which decrease with distance from the epicenter (CGS 2002). **Table 2.1-5** provides descriptions of the effects of ground shaking intensities along with a general range of magnitudes that are often associated with those intensities. Additionally, corresponding averages for peak ground velocity and peak acceleration are provided.

**TABLE 2.1-5
MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES**

Richter Magnitude Scale	Modified Mercalli Scale	Effects of Intensity	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration ¹
0.1–0.9	I	Not felt except by a very few under especially favorable circumstances.	—	—
1.0–2.9	II	Felt by only a few persons at rest, especially on upper floors of buildings.	—	—
3.0–3.9	III	Felt quite noticeably in doors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing cars may rock slightly. Vibration like passing a truck.	—	0.0035–0.007 g
4.0–4.5	IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensation like heavy truck striking building. Standing cars rocked noticeably.	1–3	0.015–0.035 g
4.6–4.9	V	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.	3–7	0.035–0.07 g
5.0–5.5	VI	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.	7–20	0.07–0.15 g
5.6–6.4	VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.	20–60	0.15–0.35 g
6.5–6.9	VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.	60–200	0.35–0.7 g
7.0–7.4	IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.	200–500	0.7–1.2 g

Richter Magnitude Scale	Modified Mercalli Scale	Effects of Intensity	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration ¹
7.5–7.9	X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.	≥ 500	> 1.2 g
8.0–8.4	XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.	—	—
8.5+	XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.	—	—

Source: USGS 2015b

1. Peak acceleration is expressed in “g” (the acceleration due to earth’s gravity, equivalent to g-force).

An active fault is one that shows displacement within the last 11,000 years and therefore is considered more likely to generate a future earthquake. The 1994 Alquist-Priolo Earthquake Fault Zoning Act requires the California State Geologist to establish regulatory zones around the surface traces of active faults that pose a risk of surface ground rupture and to issue appropriate maps in order to mitigate the hazard of surface faulting to structures for human occupancy. No active or potentially active faults have been previously mapped across the project site, and the site is not located within a current Alquist-Priolo Earthquake Fault Zone (CGS 2015). The Chino fault, which is located approximately 7 miles west of the project site, is not an Alquist-Priolo fault, meaning that it does not pose a risk of surface ground rupture. Since no faults traverse the project site, the potential for fault ground rupture at the site is considered very low.

The project site is located in tectonically active Southern California and in proximity to regional active faults that could affect the site, including the Whittier, Elsinore-Glen Ivy, San Jose, Cucamonga, Sierra Madre, San Jacinto-San Bernardino segment, and Puente Hills faults. The largest fault in Southern California, the San Andreas Fault System, is located approximately 20 miles northeast of the site.

Liquefaction

Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Three factors are required for liquefaction to occur: (1) loose, granular sediment (typically “made” land and beach and stream deposits that are young enough (late Holocene) to be loose); (2) saturation of the sediment by shallow groundwater (water fills the spaces between sand and silt grains); and (3) strong shaking. Liquefaction causes three types of ground failure: lateral spreads, flow failures, and loss of bearing strength. In addition, liquefaction enhances ground settlement and sometimes generates sand boils (fountains of water and sediment emanating from the pressurized liquefied zone). According to Riverside County’s Map My County (2015) application, the project site is located in moderate and high liquefaction zones.

Landslides and Slope Failure

Review of geologic literature and geologic mapping did not indicate the presence of landslides on or adjacent to the site. The site and its surrounding areas are generally level, precluding the occurrence of landslides (Map My County 2015).

2.1 EXISTING SETTING

Seiches and Tsunamis

There is no potential for seiche or tsunami at the project site since no large surface water bodies (lakes, reservoirs, etc.) are located nearby. The Federal Emergency Management Agency's (FEMA) (2015) National Flood Insurance Program designates the proposed project site as within Zone X, which indicates minimal flooding potential. This subject is further discussed and analyzed in Subsection 3.11, Hydrology and Water Quality.

AGRICULTURAL RESOURCES

Agricultural operations are a significant feature in the economy of Riverside County. According to the County's 2013 Agricultural Production Report, the estimated gross value of agricultural production in Riverside County for 2013 was over \$1.3 billion, which represents a 6 percent increase over the 2012 gross valuation. However, according to the City's General Plan, Eastvale's agricultural history came not primarily from the productivity of local soils but from the area's proximity to the Chino Dairy Preserve (Eastvale 2013a). Today, only a handful of dairies remain in Eastvale as the area has largely been converted to urban uses.

Farmland Mapping

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation, maps agricultural areas based on soil quality and land use, with five agriculture-related categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. **Figure 2.1-5** shows the mapped categories on the project site and **Table 2.1-6** lists the acreages and describes the features of each category. As shown, the 2012 FMMP map for Riverside County shows 70.6 acres as Prime Farmland and 66.2 acres of Farmland of Local Importance on the project site.

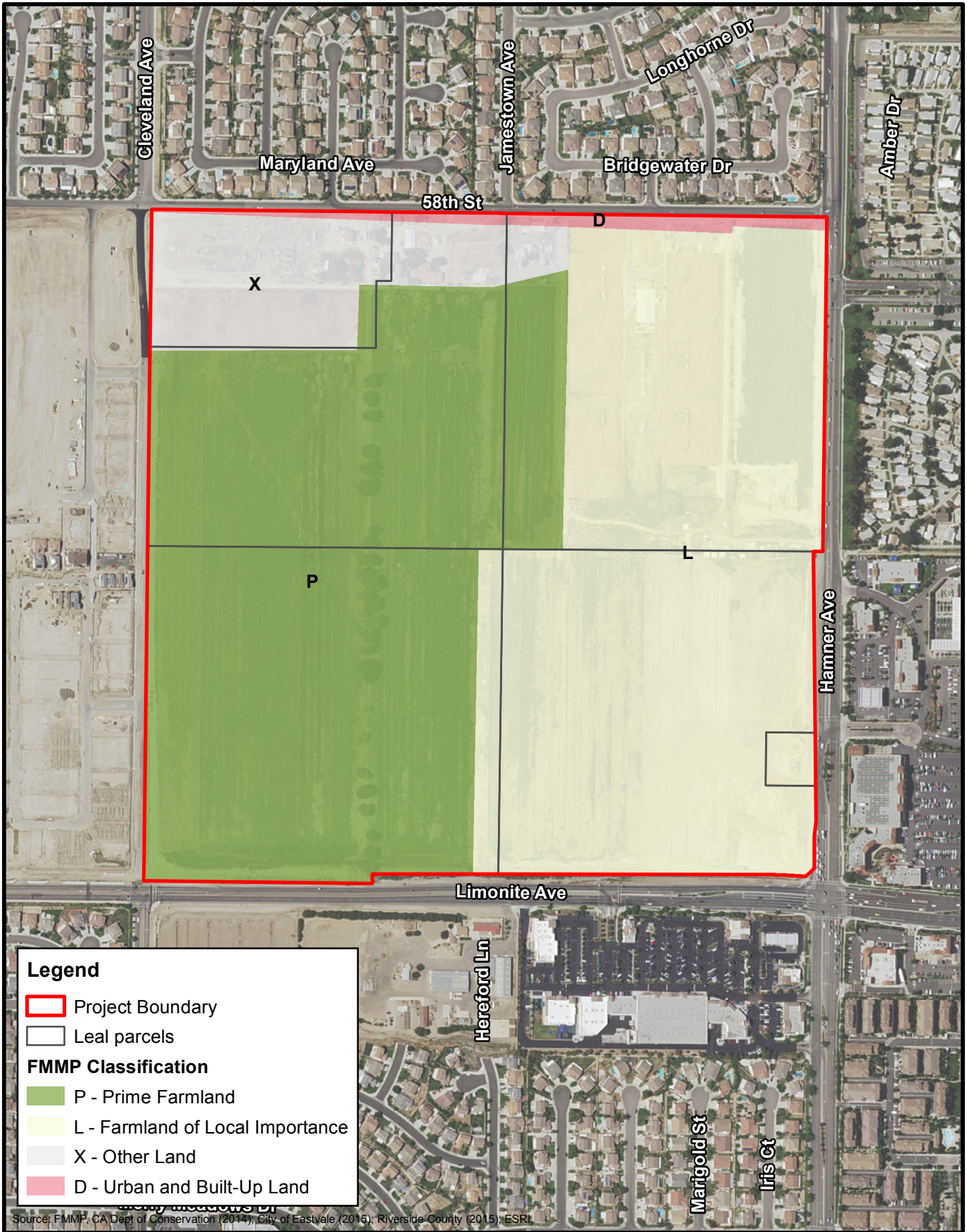


Figure 2.1-5
Farmland Classification

2.1 EXISTING SETTING

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**TABLE 2.1-6
IMPORTANT FARMLAND ON THE PROJECT SITE**

Farmland Type	Description	Important Farmland (acres)
Prime Farmland	Land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Must have been used for production of irrigated crops at some time during the four years prior to the Important Farmland Map date.	70.6
Farmland of Local Importance	Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. In Riverside County, Farmland of Local Importance is defined as: <ul style="list-style-type: none"> • Soils that would be classified as Prime and Statewide but lack available irrigation water. • Lands planted to dryland crops of barley, oats, and wheat. • Lands producing major crops for Riverside County but that are not listed as unique crops. These crops are identified as returning one million or more dollars in the 2013 Riverside County Agriculture Crop Report. Crops identified are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelons. • Dairy lands, including corrals, pasture, milking facilities, and hay and manure storage areas if accompanied with permanent pasture or hay land of 10 acres or more. • Lands identified by city or county ordinance as Agricultural Zones or Contracts, which includes Riverside City "Proposition R" lands. • Lands planted to jojoba that are under cultivation and are of producing age. 	66.2
Other Land*		13.9
Urban and Built-Up Land		2.4
Total		153.1

Source: DOC 2015a and 2015b

Note: The total acreage in this table does not match the total acres for the project site. This is due to rounding and to slight differences in the information bases used to calculate the tables.

* Other Land indicates those lands not otherwise placed in a FMMP category.

Williamson Act Contract Lands

Riverside County participates in the Williamson Act program. As of 2013, there were 56,649 acres of land in Riverside County under Williamson Act contracts (DOC 2015c, p. 11). An extension of the Williamson Act, called the Farmland Security Zone (FSZ) program, permits farmers and ranchers to garner an additional 35 percent property tax reduction by keeping their land in agriculture for a minimal initial term of 20 years; however, Riverside County has not adopted the FSZ program. The project site does not contain any Williamson Act contracted lands.

2.1 EXISTING SETTING

HAZARDS AND HAZARDOUS MATERIALS

Site Reconnaissance

Aerial imagery using Eastvale Geographic Information Systems (GIS) and a site visit conducted on May 26, 2015, determined that the project site is largely vacant and heavily disturbed, with several structures located within the boundaries of the site. The majority of the structures are located in APN 164-030-010, the northernmost portion of APN 164-030-025, and throughout APN 164-030-012. No structures were visible on the other parcels using aerial imagery or during the site visit. Minor nuisance dumping such as abandoned vehicles and trucks, and other debris, were noted during the site visit.

Hazardous Materials and Waste Defined

Under Title 22 of the California Code of Regulations (CCR), the term *hazardous substance* refers to both hazardous materials and hazardous wastes; both are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (22 CCR Section 66261.30). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed.

Public health is potentially at risk whenever hazardous materials are or will be used. It is necessary to differentiate between the hazard of these materials and the acceptability of the risk they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to health and public safety is determined by the probability of exposure and to the inherent toxicity of a material (DTSC 2015a).

Factors that can influence health effects when human beings are exposed to hazardous materials include the dose to which the person is exposed, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, cleanup requirements for hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over a project.

Hazardous and Contaminated Sites

Hazardous materials consist of substances that by their nature, lack of containment, and reactivity have the capability of inflicting harm. Hazardous materials can be toxic, corrosive, flammable, explosive, reactive, an irritant, or a strong sensitizer and include certain infectious agents, radiological materials, oxides, oil, used oil, petroleum products, and industrial solid waste substances. They are used in almost every manufacturing operation and by retailers, service industries, and homeowners. Hazardous material incidents are one of the most common technological threats to public health and the environment. Incidents may occur as the result of natural disasters, human error, or accident. Hazardous material incidents typically take three forms:

- **Fixed facility incidents** – It is reasonably possible to identify and prepare for a fixed site incident because laws require those facilities to notify state and local authorities about what is being used or produced there.
- **Transportation incidents** – Transportation incidents are more difficult to prepare for because it is impossible to know what materials could be involved until an accident actually happens.
- **Pipeline incidents** – Pipelines carry natural gas and petroleum. Breakages in pipelines carry differing amounts of danger, depending on where and how the break occurs and what is in the pipe.

Areas of Known Hazardous Contamination

Cortese List

The State of California Hazardous Waste and Substances Site List (also known as the Cortese List) is a planning document used by state and local agencies and by private developers to comply with CEQA requirements in providing information about the location of known hazardous materials sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to annually update the Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list.

The EnviroStor database provides the DTSC's component of Cortese List data by identifying state response sites, federal Superfund sites, school cleanup sites, and voluntary cleanup sites. The EnviroStor database identifies sites that have known contamination or sites for which further investigation is warranted. It also identifies facilities that are authorized to treat, store, dispose, or transfer hazardous waste (DTSC 2015a).

The EnviroStor database does not identify any hazardous material sites on the Leal Master Plan project site (DTSC 2015b).

Leaking Underground Storage Tanks

Leaking underground storage tanks (LUST) are a significant source of petroleum impacts to groundwater and can also result in the following potential threats to health and safety (SWRCB 2015):

- Exposure from impacts to soil and/or groundwater
- Contamination of drinking water aquifers
- Contamination of public or private drinking water wells
- Inhalation of vapors

The State Water Resources Control Board (SWRCB) records soil and/or groundwater contamination caused by LUSTs in its GeoTracker database. An inquiry through the SWRCB's (2015) GeoTracker database indicates that there are no open LUST sites within the boundaries of the proposed project site. However, three open LUST sites are located in proximity to the project site (see **Table 2.1-7**).

2.1 EXISTING SETTING

**TABLE 2.1-7
OPEN LUST SITES IN PROXIMITY TO PROPOSED PROJECT SITE**

Site/Facility Name	Address Description	Cleanup Status
Texaco Swan Lake (T0606500101)	5800 Hamner Avenue	Completed – Case Closed
Excelsior Farms (T0606500369)	7401 Hamner Avenue	Completed – Case Closed
SCE Mira Loma Substation (T0607199165)	13568 Milliken Avenue	Completed – Case Closed

Source: SWRCB 2015

In addition, the SWRCB is required to at least annually identify and conduct water quality assessment tests (through the Regional Water Quality Control Boards) of solid waste disposal sites to determine whether any hazardous waste has migrated into the water. The SWRCB administers the process of data collection and site testing through the Land Disposal Program. The program regulates waste discharge to land for treatment, storage, and disposal in waste management units, which include waste piles, surface impoundments, and landfills. The result of the current SWRCB collection and submittal of data does not include any solid waste sites on the project site (SWRCB 2015).

Finally, as a component of the Cortese List, the SWRCB is required to submit at least annually a list of all cease and desist orders issued after January 1, 1986, and of all cleanup or abatement orders (CAO) issued after January 1, 1986, that concern the discharge of wastes that are hazardous materials. As a component of compliance, the SWRCB publicizes available active CAOs and cease and desist orders. There are no actively enforced cleanup or abatement orders within the boundaries of the project site.

Household Hazardous Waste

Hazardous materials, used in many household products (such as drain cleaners, waste oil, cleaning fluids, insecticides, and car batteries), are often improperly disposed of as part of normal household trash. These hazardous materials can interact with other chemicals to create risks to people or cause soil and groundwater contamination. The California Department of Public Health and the City of Eastvale define household hazardous waste as any substance that is characteristic of one of the following:

- **Ignitability** – flammable (e.g., lighter fluid, spot and paint removers)
- **Corrosivity** – eats away materials and can destroy human and animal tissue by chemical action (e.g., oven and toilet bowl cleaners)
- **Reactivity** – creates an explosion or produces deadly vapors (e.g., bleach mixed with ammonia-based cleaners)
- **Toxicity** – capable of producing injury, illness, or damage to humans, domestic livestock, or wildlife through ingestion, inhalation, or absorption through any body surface (e.g., rat poison, cleaning fluids, pesticides, bleach)

Currently, the closest household hazardous waste collection facility to the project site is the Lake Elsinore Permanent Household Waste Collection Facility at 512 North Langstaff Street in Lake Elsinore. The facility only accepts hazardous waste from residential sources. It is operated by the Riverside County Waste Management Department (RCWMD 2015).

Known and Unknown Hazardous Materials

Asbestos-Containing Building Materials

Structures constructed or remodeled between 1930 and 1981 have the potential to include asbestos-containing building materials. Asbestos is the name given to a number of naturally occurring fibrous minerals with high tensile strength, the ability to be woven, and resistance to heat and most chemicals. Because of these properties, asbestos fibers have been used in a wide range of manufactured goods, including roofing shingles, ceiling and floor tiles, paper and cement products, textiles, coatings, and friction products such as automobile clutch, brake, and transmission parts. When asbestos-containing materials are damaged or disturbed by repair, remodeling, or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems (EPA 2015a).

As noted during the site reconnaissance, several buildings are located on the project site. Because the ages of the existing buildings are unknown at this time, there is a potential that they were built or remodeled during the time period when asbestos was used in building materials.

Lead

Lead is a toxic metal that was used for many years in a variety of products and may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Research suggests that the primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil (EPA 2015b).

As noted during the site reconnaissance, several buildings are located on the project site. Because the ages of the existing buildings are unknown at this time, there is a potential that they contain lead-based paint. In addition, the soil surrounding these buildings could be contaminated by lead.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) belong to a broad family of human-made organic chemicals known as chlorinated hydrocarbons. Until their manufacture was banned in 1979, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and in many other industrial applications (EPA 2015c). Prior to the 1979 ban, PCBs entered the environment during their manufacture and use in the United States. Today, PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain PCBs, illegal or improper dumping of PCB wastes, leaks or releases from electrical transformers containing PCBs, and disposal of PCB-containing consumer products into municipal or other landfills not designed to handle hazardous waste. PCBs have been demonstrated to cause cancer and a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system (EPA 2015c).

As stated above, minor nuisance dumping, such as abandoned vehicles and trucks, and other debris, were noted during the site visit. As a result of on-site dumping, there may be a potential for PCB soil contamination on the project site.

2.1 EXISTING SETTING

Residual Agricultural Chemicals

Historically, agriculture has been one of the major elements of Riverside County's economic base, and although greater diversification of land use has occurred over the past decade, agriculture remains an active industry. In 2013, 2,456,874 pounds of active pesticide ingredients were applied to lands in Riverside County (CDPR 2013). Frequent applications of agriculture-related chemicals over time can eventually result in the accumulation of chemicals in the topsoil. Therefore, persistent residual chemicals may be present at differing levels in soils in Eastvale. Exposure to pesticides can cause harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms.

The Master Plan area has been occupied as a dairy and home site for approximately 40 years. Dairy operations are not typically associated with pesticide application. Therefore, it is unlikely that residual pesticides are present on the project site.

Naturally Occurring Hazardous Materials

Fibrous (Asbestiform) Minerals (Naturally Occurring Asbestos)

Asbestos is the generic term for the naturally occurring fibrous (asbestiform) varieties of six silicate minerals: chrysotile, tremolite (when fibrous), actinolite (when fibrous), crocidolite (fibrous riebeckite), anthophyllite (when fibrous), and amosite (fibrous cummingtonite-grunerite). Chrysotile, which belongs to the serpentine mineral group, and amphibole asbestos (such as tremolite) occur naturally in certain geologic settings in California, most commonly in association with ultramafic rocks and along associated faults.

Asbestos is a known carcinogen, and exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a noncancerous lung disease which causes scarring of the lungs) (CARB 2010). The asbestos content of many manufactured products has been regulated in the United States for a number of years. In 1998, new concerns were raised about activities that disturb rocks and soil containing naturally occurring asbestos that could release asbestos-laden dust. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present (CARB 2010).

Since natural asbestos occurs most commonly in association with ultramafic rocks, the presence of ultramafic rocks in a region indicates the possibility of naturally occurring asbestos materials. The potential occurrence and distribution of naturally occurring asbestos fibers in Riverside County is documented by the US Geological Survey (USGS) and the California Geological Survey.

According to these agencies, Eastvale does not encompass any areas that have been identified as containing ultramafic rock (USGS 2011). Therefore, it is unlikely that naturally occurring asbestos is present on the project site.

Radon Potential

Radon isotope-222 is a colorless, odorless, tasteless radioactive gas that comes from the natural decay of uranium, which is found in nearly all soils. Current evidence indicates that increased lung cancer risk is directly related to radon-decay products. The amount of radon in the soil

depends on soil chemistry, which varies depending on location. Radon levels in soil range from a few hundred to several thousand picocuries per liter (pCi/L). The amount of radon that escapes from the soil to enter a building depends on the weather, soil porosity, soil moisture, and the suction within the building. The EPA (2015d) recommends the use of radon control methods if the radon level is 4 pCi/L or higher. The EPA uses three zone designations in order to reflect the average short-term radon measurement that can be expected in a building without the implementation of radon control methods. The radon zone designation of the highest potential is Zone 1.

Eastvale, including the project site, is in Zone 2, which indicates a predicted average indoor radon screening level between 2 pCi/L and 4 pCi/L, considered a low potential for radon (EPA 2015d).

Wildland Fires

A wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger and causing destruction to life and property. Wildfires can occur in undeveloped areas and spread to urban areas where structures and other human development are more concentrated. A wildland-urban interface is an area where urban development has been located in proximity to open space or "wildland" areas. Fires that occur in the wildland-urban interface areas affect natural resources as well as life and property.

The California Department of Forestry and Fire Protection (Cal Fire) identifies the project site as a Local Responsibility Area (LRA). In a Local Responsibility Area, fire protection can be provided by a city fire department, fire protection district, or county, or by Cal Fire under contract to the local government. In addition to establishing local or state responsibility for wildfire protection in a specific area, Cal Fire designates areas as very high fire hazard severity (VHFHS) zones or non-VHFHS zones. Cal Fire assigns these designations based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. Following designation, Cal Fire recommends the adoption of the fire hazard severity zones by local jurisdictions. The City of Eastvale has adopted the most recent update (2008) to the fire hazard severity zone.

The project site is not in a fire hazard severity zone and is designated as a non-VHFHS for both the LRA and the State Responsibility Area (SRA).

HYDROLOGY AND WATER QUALITY

Climate and Precipitation

Eastvale has hot, dry summers and cooler, wetter winters. Average annual precipitation in the region ranges from 10 to 13 inches per year in the inland alluvial valleys, reaching 36 inches or more in the San Bernardino and San Jacinto mountains. Most of the precipitation in the region occurs between November and March in the form of rain, with variable amounts of snow in the higher elevations. The climatological cycle of the region results in high surface water flows in the spring and early summer followed by low flows during the dry season. Winter and spring floods generated by storms are not uncommon in wet years (Cities and County of Riverside 2014).

2.1 EXISTING SETTING

Surface Water

The project site is located in the Santa Ana River watershed, which is located in the northwestern corner of Riverside County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea watershed, on the southwest by Orange County, and on the northwest by San Bernardino County. The Santa Ana watershed, including the San Jacinto River subwatershed, encompasses 1,603 square miles (22 percent of the 7,300 square miles in Riverside County).

Because the Santa Ana River watershed is arid, there is little natural perennial surface water. Lake Elsinore is the only natural freshwater lake of any size in the watershed. A variety of water storage reservoirs (e.g., Lake Perris, Canyon Lake, and Lake Mathews) and flood control areas (Prado Dam area) have been created to hold surface water in Riverside County (County of Riverside 2014). Cucamonga Creek (Reach 1) and the Santa Ana River (Reach 3) are the two major rivers that traverse Eastvale and are potential receiving water bodies for the project site. Cucamonga Creek flows within a concrete channel west of the project site and the Santa Ana River flows south of the project site.

Groundwater

Eastvale is located atop the Chino Groundwater Basin (Chino Basin), which is one of the largest groundwater basins in Southern California. The Chino Basin contains approximately 5,000,000 acre-feet³ (AF) of water and has an unused storage capacity of approximately 1,000,000 AF. The Chino Basin consists of approximately 235 square miles of the upper Santa Ana River watershed and lies within portions of San Bernardino, Riverside, and Los Angeles counties. The Chino Basin is bounded by Cucamonga Basin and the San Gabriel Mountains to the north, the Temescal Basin to the south, Chino Hills and Puente Hills to the southwest, San Jose Hills, Pomona and Claremont Basins on the northwest and the Rialto/Colton Basins on the east. Groundwater in the Chino Basin generally flows in a south-southwest direction from the primary areas of recharge in the northern parts of the basin toward the Prado Flood Control Basin in the south. Ground water recharge to the basin occurs by direct infiltration or precipitation on the basin floor, by infiltration of surface flow, and by underflow of ground water from adjacent basins.

Water Quality

Surface Water Quality

Section 303(d) of the federal Clean Water Act requires states to identify the waters of the State that do not meet the designated beneficial uses and to develop total maximum daily loads (TMDLs) for such waters, with oversight by the US Environmental Protection Agency (EPA). These waters are commonly referred to as impaired. A TMDL is a quantifiable assessment of potential water quality issues, contributing sources, and load reductions or control actions needed to restore or protect bodies of water. Both of the receiving waters to the potential receiving water bodies for the project site, Cucamonga Creek and the Santa Ana River, are included on the 2010 Clean Water Act Section 303(d) List of Water Quality Limited Segments requiring TMDL. **Table 2.1-8** details the pollutants that are impairing the water bodies and the status of the TMDLs.

³ An acre-foot of water is the amount water it would take to cover one acre of land to a depth of one foot.

**TABLE 2.1-8
RECEIVING WATERS FOR URBAN RUNOFF – SANTA ANA RIVER WATERSHED**

Receiving Water	303(d) List Impairments	TMDL Status
Cucamonga Creek (Reach 1 – Valley Reach)	Cadmium	TMDL needed
	Coli form Bacteria	TMDL approved 2007
	Copper	TMDL needed
	Lead	TMDL needed
	Zinc	TMDL needed
Santa Ana River (Reach 3)	Copper	TMDL needed
	Lead	TMDL needed
	Pathogens	TMDL approved 2007

Source: SWRCB 20

Groundwater Quality

Groundwater quality in the lower Chino Basin is poor as a result of nitrates and total dissolved solids (TDS) exceeding drinking water standards. Nitrate and TDS intrusion are primarily from historic dairy and agricultural users. Other water quality concerns in the Chino Basin include the presence of perchlorate, VOCs and other chemicals associated with airport cleanup sites (Ontario International and Chino Airports). With the completion of Chino Basin Desalter I and the construction of Chino Basin Desalter II and the 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 and the regulatory oversight provided by the Regional Water Quality Control Board (RWQCB), particularly as related to salts, when combined with treatment, result 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 (JCSD 2011, p. 74).

Flooding

According to Flood Insurance Rate Map (FIRM) Panels 06065CO681G and 06065CO677G, published by the Federal Emergency Management Agency (FEMA), for Riverside County dated August 28, 2008, the project site is designated as Zone X (FEMA 2015). Zone X is defined by FEMA as an area of minimum flood hazard, usually outside the limits of the 100-year and 500-year floods.

DEMOGRAPHICS: POPULATION, HOUSING, AND EMPLOYMENT

Population Trends

Eastvale, once a rural area, was predominantly dairy farms and agricultural uses until the late 1990s. At that time, the area started to suburbanize to accommodate the influx of people coming from neighboring Orange and Los Angeles counties seeking affordable housing adjacent to the transportation corridors strategically located in the vicinity of Eastvale, including Interstate 15 and State Routes 91, 60, and 71. Between 2000 and 2010, Eastvale's population grew by almost 50,000 people, or 1,136 percent (as compared to Riverside County as a whole, which grew by about 42.9 percent). Since then, the city has grown at a rate of approximately 2

2.1 EXISTING SETTING

to 3 percent per year, as shown in **Table 2.1-9**. The California Department of Finance (DOF) estimates that Eastvale’s 2015 population is 60,633, a 2.5 percent increase from 2014.

**TABLE 2.1-9
CITY OF EASTVALE AND RIVERSIDE COUNTY POPULATION GROWTH**

Year	City of Eastvale		Riverside County	
	Population	Percentage Change	Population	Percentage Change
2000	4,342*	—	1,545,387	—
2010	53,668*	1,136%	2,189,641	42.9%
2011	54,087	0.7%	2,205,731	0.7%
2012	55,639	2.8%	2,229,467	1%
2013	57,189	2.7%	2,253,516	1%
2014	59,151	3.4%	2,280,191	1.1%
2015	60,633	2.5%	2,308,441	1.2%

Source: DOF 2015a; Eastvale 2013b

* The 2010 US Census took place prior to the incorporation of the City of Eastvale. Therefore, census data is for the Eastvale Census Designated Place and numbers may vary slightly from the actual city boundaries.

Population Forecasts

In Riverside County, forecasting of population and demographic trends is performed by the local council of governments, the Southern California Association of Governments (SCAG). For the specific subregion in which Eastvale is located, western Riverside County, SCAG administers a subregional council of governments, the Western Riverside Council of Governments (WRCOG). As a component of its long-term planning responsibilities, WRCOG publishes forecast demographic and population data for the subregion (see **Table 2.1-10**). As shown in the table, WRCOG estimates the addition of 9,115 residents in Eastvale between 2020 and 2035 for a total population of 68,300.

**TABLE 2.1-10
FORECAST POPULATIONS – CITY OF EASTVALE AND WESTERN RIVERSIDE COUNTY**

Year	City of Eastvale		Western Riverside County	
	Population	Percentage Growth	Population	Percentage Growth
2020	61,500	—	2,140,500	—
2035	68,300	11%	2,749,200	28.4%

Source: WRCOG 2011

Housing Units

According to the DOF, there are a total of 15,909 housing units in the city, of which the majority are single-family detached homes. **Table 2.1-11** shows the types of housing units and compares the city housing unit profile to that of the county.

A vacancy rate can establish a relationship between housing supply and demand. For example, if the demand for housing is greater than the supply, then the vacancy rate is low and the price

of housing will most likely increase. The current vacancy rate in Eastvale is 5.9 percent, which is lower than that of Riverside County (14.2 percent).

**TABLE 2.1-11
CITY OF EASTVALE AND RIVERSIDE COUNTY HOUSING UNITS (2015)**

	Total Housing Units	Single-Family Detached		Multi-Family Attached						Mobile Homes		Total Occupied Housing Units	Vacancy Rate
				Single Attached		Two to Four		Five Plus					
City of Eastvale	15,909	14,149	89%	416	3%	266	2%	530	3%	548	3%	14,972	5.9%
Riverside County	822,910	559,700	68%	51,294	6%	38,618	5%	94,054	11%	79,244	10%	706,222	14.2%

Source: DOF 2015b

Household Trends

Generally, a household includes all related or unrelated persons who occupy a housing unit. The DOF estimates that there are a total of approximately 14,955 households in Eastvale. The average number of persons per household in Eastvale is 4.05, which is more than the average number of persons per household in the County (3.22).

Employment

According to the most recent American Community Survey conducted by the US Census Bureau (2013), the labor force in Eastvale comprised 30,882 people in 2013, representing 70.2 percent of the population over 16 years of age. The unemployment rate was approximately 7.2 percent.

In 2013, most workers in the city were employed in educational services and health care and social assistance (23.5 percent), retail trade (11 percent), manufacturing (10.1 percent), or professional, scientific, and management, and administrative and waste management services (9 percent). However, these employers were not necessarily located in the city, as 86.5 percent of the labor force commuted to work with an average commute time of 41.4 minutes.

PUBLIC SERVICES AND UTILITIES

Fire Protection

Riverside County Fire Department

The City of Eastvale contracts with the Riverside County Fire Department (RCFD) for fire protection services and emergency medical services. The City is served by County Fire Station 27 located at 7067 Hamner Avenue in Eastvale. The RCFD provides full service, municipal and wildland fire protection, pre-hospital emergency medical response by paramedics and EMTs, technical rescue services, and response to hazardous materials discharges. The RCFD responds on average to approximately 1,400 incidents each year. Of these incidents, approximately 83 percent are medical emergencies and 13 percent are fires. The remaining 4 percent of incidents include technical rescues and hazardous materials incidents (Eastvale 2015).

2.1 EXISTING SETTING

Personnel and Facilities

The RCFD is one of the largest regional fire service organizations in California, supplementing 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 RCFD operates 93 fire stations in six divisions comprising 17 line battallions, providing fire suppression, emergency medical, technical rescue, fire prevention, and related services. The equipment used by the RCFD has the versatility to respond to both urban and wildland emergencies. RCFD Station 27 is located at 7067 Hamner Avenue, approximately 1 mile from the Master Plan area.

The RCFD has approximately 55 volunteer fire companies with a roster of approximately 700 volunteer firefighters who serve Riverside County, including numerous contract cities. Volunteers respond with career firefighters to wildland fires, structure and vehicle fires, medical emergencies, traffic collisions, hazardous materials, floods, and other emergencies 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. Many of these squads carry specialized equipment, including Jaws of Life and other firefighting and rescue tools. The RCFD also utilizes volunteer support teams to provide additional staffing and services at the Ben Clark Training Center, the Indio and Riverside Emergency Operations Centers, the Perris Emergency Command Center, and the Mobile Emergency Operations Center command post vehicle (RCFD 2009, p. 9).

Incident Calls

The RCFD responded to 133,536 calls for service during the 2013 calendar year, 2,290 of which were in Eastvale. The 10-year activity totals for RCFD incident calls are detailed in **Table 2.1-12**.

TABLE 2.1-12
RCFD INCIDENT CALL 2004–2013

Year	Total Incidents	Daily Average	Percentage Change
2004	106,050	291	3.76%
2005	110,224	302	3.94%
2006	112,011	307	1.62%
2007	114,535	314	2.25%
2008	114,599	314	0.06%
2009	115,718	317	7.33%
2010	117,859	322	1.85%
2011	121,703	333	3.26%
2012	130,620	357	7.33%
2013	133,536	365	2.23%

Source: RCFD 2013, p. 21

Response Times and Service Standards

The RCFD's current standard for average response time is 7 minutes throughout the urbanized areas. In addition, RCFD standards hold that urban development should be located no more than 3 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 the shared use of specialized equipment and personnel between neighboring communities.

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.

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. ISO then assigns a Public Protection Classification 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 2015):

- 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
- 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 Public Protection Classification rating of 4; the Eastvale area has a "split classification" rating of "4/9". For properties within 5 miles of a fire station and within 1,000 feet of a fire hydrant, including the project site, the ISO rating 4 applies.

2.1 EXISTING SETTING

Law Enforcement

Riverside County Sheriff’s Department

The City of Eastvale contracts with the Riverside County Sheriff’s Department (RCSD) for law enforcement services. The personnel assigned to serve the City operate out of the Jurupa Valley Station located at 7477 Mission Boulevard in neighboring Jurupa Valley (Eastvale 2015).

Calls for Service and Service Standards

Calls for service statistics are one of the tools for determining appropriate staffing levels and resource utilization in law enforcement. 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 (see **Table 2.1-13**).

**TABLE 2.1-13
CALLS FOR POLICE SERVICE IN EASTVALE**

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

Source: RCSD 2011

Public Schools

Eastvale is within the boundaries of the Corona-Norco Unified School District, which had approximately 53,467 students enrolled in 50 schools during the 2011/2012 school year. Six district schools serve Eastvale, with a total enrollment of approximately 10,304 students during the 2013/2014 school year (Ed-Data 2015). The Leal Master Plan area is served by three of these schools—Harada Elementary School, River Heights Intermediate School, and Eleanor Roosevelt High School—described in **Table 2.1-14**.

**TABLE 2.1-14
CURRENT SCHOOL CAPACITY AND ENROLLMENT**

School Name	Location	Capacity	Current Enrollment (2015)	Projected Enrollment (2024)
Harada Elementary	12884 Oakdale Street, Corona	1,300	1,371	1,747
River Heights Intermediate	7227 Scholar Way, Corona	1,300	1,059	1,064
Eleanor Roosevelt High	7447 Scholar Way, Corona	4,000	3,823	4,431

Source: CNUSD 2015

As shown in the above table, enrollment at Harada Elementary School currently exceeds the school’s capacity by 71 seats and is projected to exceed capacity by 447 seats by 2024. Enrollment at Eleanor Roosevelt High School is also projected to exceed capacity by 431 seats in 2024. However, each of these campuses has available space to add additional classrooms to accommodate anticipated residential growth in the city (CNUSD 2015).

Parks and Recreation

Eastvale currently encompasses a total of 16 parks and recreation areas, which are owned and operated by the Jurupa Community Services District (JCSD) and the Jurupa Area Recreation and Park District (JARPD), two independent agencies. The JCSD owns and maintains public parks in the portion of Eastvale west of Hamner Avenue, while the JARPD provides public parks in the portion of Eastvale east of Hamner Avenue and in the neighboring city of Jurupa Valley. The existing parks and the responsible agency are shown in **Table 2.1-15**.

**TABLE 2.1-15
PARK AND RECREATION FACILITIES**

Park Name	Park Acreage	Park Jurisdiction	Park Location
Moon River Tot Lot	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 65 th 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
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
Mountainview 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: JCSD 2015; JARPD 2015

2.1 EXISTING SETTING

Water

Jurupa Community Services District

Potable water in Eastvale is supplied by local groundwater from the Chino Groundwater Basin provided by the JCSD, which serves an area of 48 square miles in Riverside County, including the project area (JCSD 2011, p. 5). As described in more detail below, the JCSD supplies potable water pumped from the Chino Basin, as well as groundwater extracted from the Chino Basin and treated by the Chino I and II Desalters via a joint powers authority (JPA) with the Chino Basin Desalter Authority (CDA). The JCSD currently has 16 wells, 8 booster stations, and 15 reservoirs of 53.7 million gallon capacity (JCSD 2011, p. 5).

Water Supply

As of 2011, the JCSD is not utilizing imported water supplies; all potable water is produced from the Chino Basin, which was adjudicated by a judgment in 1978 (the judgment). The judgment represents a plenary adjudication of all water rights in the Chino Basin. Pumping in the Chino Basin is managed and reported by the Chino Basin Watermaster (Watermaster) pursuant to the judgment. Groundwater management activities implemented by the Watermaster are regulated by a complex series of agreements and court orders that followed the judgment, including the Optimum Basin Management Program and the Peace I and Peace II Agreements, etc., which are discussed in more detail in Subsection 2.2, Regulatory Framework.

In addition to establishing water rights, the judgment also established the safe yield of the Chino Basin as 140,000 acre-feet per year (AFY) and allocated that yield among three pools as follows:

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

Land use conversion in the Chino Basin (as defined by the Judgment) occurs when a member of the Chino Basin Agricultural Pool converts property to a nonagricultural use. Prior to 2000, for every acre converted to nonagricultural use, the appropriator in which the agricultural property was located received 1.3 AFY of water rights. After 2000, the amount the appropriator received increased to 2 AFY of water rights for agricultural land conversion within its jurisdiction. As of 2011, the JCSD had an assigned production right of 2,061.118 AFY out of the total Chino Basin's safe yield of 140,000 AFY (JCSD 2011, p. 38).

In approving the Peace II Agreement, the court ordered that the safe yield of the basin should be estimated annually and that the Watermaster should "develop a technically defensible approach to estimate Safe Yield annually." The safe yield of the basin was 140,000 AFY through 2011 and, thereafter, the safe yield estimate was presented in the 2009 Production Optimization and Evaluation of the Peace II Project Description (WEI 2009). The safe yield of the Chino Basin is projected to decline to about 129,000 AFY by 2035 (WEI 2013, p. 2-13). The assigned production right of each appropriator will be reduced accordingly, including that of the JCSD.

Regardless of assigned production right and safe yield, a fundamental premise of the judgment is that all Chino Basin water users will be allowed to pump sufficient water from the basin to meet their requirements. The judgment does not place specific limits on the groundwater production by any party to the judgment, including the JCSD. 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). In fact, the judgment shows a clear expectation that the parties to the judgment, including the JCSD, would produce water in excess of their adjudicated production rights; provided, however, that they must pay a replenishment assessment when production exceeds that amount. The JCSD's ability to produce water from the Chino Basin is thus largely a matter of cost, as water produced in excess of a party's production rights will cost more than water produced within a party's production rights (JCSD 2011, p. 40). Groundwater artificial recharge is discussed in more detail under the Water Supply Reliability subheading below.

The JCSD's existing potable water supply comes from 16 wells within the district's service area and drilled in the Chino Basin. The JCSD also receives groundwater extracted from the Chino Basin and treated at the CDA's Chino I and II Desalters (see below). The JCSD's historical pumping is shown in **Table 2.1-16** and the projected future groundwater production through 2035 is shown in **Table 2.1-17**.

CDA Chino Desalters

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 and ion exchange treatment processes to remove nitrates from groundwater. The desalter production process increases local water supplies by restoration of contaminated water through the treatment process and by pumping out water and lowering groundwater levels, thus halting flow out of the basin and into the Santa Ana River and keeping water in-basin for local use. The Chino I Desalter is located in Chino and began operation in 2000. Chino I produced an average of 11.1 million gallons per day (mgd) of drinking water in 2012. The Chino II Desalter is located in Jurupa Valley and began operation in 2006. Chino II produced an average of 10.6 mgd of drinking water in 2012. The JCSD currently has a contractual obligation to purchase a minimum of 7.9 mgd (8,200 AFY) from the Chino Basin Desalter Authority. The CDA is in the process of an expansion project, known as the Chino Desalter Phase 3 project, which will increase desalter groundwater pumping from the lower Chino Basin to approximately 40,000 AFY and will provide at least 10 mgd of additional product water capacity. The JCSD will have an additional entitlement of 3,533 AFY of water per year (for a total of 11,733 AFY) when the Phase 3 Expansion Project is complete in 2015. The CDA contracts with the JCSD to operate and maintain the Chino II Desalter.

**TABLE 2.1-16
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

2.1 EXISTING SETTING

**TABLE 2.1-17
PROJECTED GROUNDWATER PRODUCTION (AFY)**

Water Supply Sources	2015	2020	2025	2030	2035
Supplier Produced Potable Groundwater from Chino Basin ^(a)	13,805	13,748	12,819	11,920	10,491
CDA Purchased – Existing	8,200	8,200	8,200	8,200	8,200
CDA Purchased – Future	3,300	3,300	3,300	3,300	3,300
Riverside Basin Groundwater Pumping – Existing (non-potable) ^(b)	600	600	600	600	600
Chino Basin Groundwater Pumping – Existing (non-potable) ^(b)	200	200	200	200	200
Chino Basin Groundwater Pumping – Future (non-potable) ^(b)	857	857	857	857	857
Total	26,692	26,905	26,976	25,077	23,648
Percentage of Total Supply	93%	79%	75%	71%	66%
Total Potential Production Capacity ^(c)	54,000	54,000	54,000	54,000	54,000

Source: JCSD 2011, p. 37

- a. JCSD production in accordance with assigned safe yield of 2,061 AFY as delineated in the Judgment with current and future Net Ag Pool Reallocation and SARWC Water lease.
- b. Projected Non-Potable Sources
- c. Potential Potable Groundwater Capacity for Maximum Day production.

Water Supply Reliability

The JCSD is able to provide sufficient water regardless of variability in weather patterns due to a diverse portfolio that currently includes a connection to another agency (Rubidoux Community Services District), access to the CDA, and local groundwater including a lease of up to 1,200 acre-feet per year of water rights from the Santa Ana River Water Company (SARWC) (JCSD 2011, p. 79). Membership in the CDA also allows access to other sources of supply from the six other CDA members (Western Municipal Water District, SARWC, and Cities of Ontario, Norco, Chino, and Chino Hills), further increasing water supply reliability (JCSD 2011, p. 79). To ensure greater reliability, the JCSD intends to increase its water portfolio by pursuing water from the Western Municipal Water District via the Riverside Corona Feeder, the Riverside Basin, and recycled water (JCSD 2011, p. 79). If one supplier reduces deliveries, additional supply can be acquired through other suppliers. However, the majority of this water comes nearly entirely from the Chino Basin distributed among various suppliers.

Because the judgment does not place specific limits on the groundwater production by any party to the judgment, including the JCSD, the reliability of the JCSD's water supply in effect depends on the long-term hydrologic balance between total recharge and discharge in the Chino Basin. Groundwater artificial recharge in the Chino Basin is an integral part of the Watermaster's basin management. The Chino Basin Watermaster has historically recharged the Chino Basin with stormwater recharge, State Water Project (SWP) water purchased from the Metropolitan Water District of Southern California, and recycled water when pumping exceeds the basin's safe yield.

However, SWP water is not a consistent supply due to drought and environmental considerations. Stormwater recharge is affected by changes in the local hydrology. Even so, the effects of SWP delivery and stormwater hydrology do not directly affect the JCSD's supplies and groundwater when pumped in accordance with the judgment. This is because the Watermaster will replenish the basin with alternate sources of supplemental water that could be used for replenishment or other recharge programs as documented in the 2013 Amendment to the 2010 Recharge Master Plan Update. In fact, the Watermaster does not necessarily rely on imported water for recharge; in the fiscal year 2011–12 Annual Report, it was noted that the Watermaster was working closely with appropriators as well as with other water districts and agencies to increase nontraditional, supplemental water supplies to replace imported replenishment-rate water over the long term (CBWM 2011). During the most recently available status report for the OBMP (July–December 2012), no imported (SWP) water had been recharged to the basin—approximately 3,210 acre-feet of stormwater and 4,170 acre-feet of recycled water were recharged (CBWM 2015). Furthermore, the desalter production process is also part of the recharge process in that the desalter plants discharge brine through the Santa Ana River Interceptor (SARI) line, thereby removing salt from the basin and enabling the recharge basins to accept recycled water (CBWM 2015). Therefore, desalters allow increased recharge of recycled water and the Desalter Phase 3 expansion project as described above will increase the recycled water capacity as well.

According to the Watermaster's 2013 Amendment to the 2010 Recharge Master Plan Update, given all anticipated groundwater production from the basin, there is no need to construct additional supplemental water recharge capacity to meet future replenishment obligations through 2035 (WEI 2013). Therefore, the Chino Groundwater Basin is considered highly reliable.

Drought Conditions

As this EIR is being prepared, California is in a severe drought that began in 2011. As such, Governor Brown declared a State of Emergency in January 2015 and directed state officials to take all necessary actions to prepare for water shortages. Regulations that have been imposed in response to the ongoing drought are discussed in Subsection 2.2, Regulatory Framework.

Wastewater

Jurupa Community Service District

The JCSD provides sewer service for over 26,000 connections to serve approximately 110,000 customers in a 48-square-mile area in Eastvale and the western portion of the city of Jurupa Valley in Riverside County. The JCSD's sewer system consists of approximately 332 miles of pipe, ranging from 6 inches to 42 inches in diameter, ten active lift stations, and three standby lift stations. The JCSD's sewer system can be divided into three sewer systems based on the three different treatment plants to which the district primarily discharges. The newest portion of the JCSD in Eastvale discharges to the Western Riverside County Regional Wastewater Authority's (WRCRWA) wastewater treatment plant (WWTP) and is referred to as the WRCRWA Treatment Zone.

The WRCWRA's wastewater treatment plant consists of primary, secondary, and tertiary treatment and was designed to treat 8 mgd of wastewater and is upgradable to treat 32 mgd (JCSD 2011, p. 53). As of November 2007, the WWTP was treating approximately 5.5 mgd. Based on the most recent wastewater flow (metered) data reported in the JCSD's 2007 Master Sewer Plan Addendum, the JCSD's wastewater flow contribution to this plant ranged from 1.92 (April 2007) to 3.56 mgd (August 2007) with an annual average of 2.10 mgd, based on monthly

2.1 EXISTING SETTING

averages from April 2007 to September 2007. The JCSD's 2007 Master Sewer Plan Addendum indicates that all of the wastewater generated within the Eastvale area (southwest portion of JCSD) will discharge into the WRCRWA for treatment via the Eastvale Interceptor. The JCSD has a 3.25 mgd capacity right. Ultimately the estimated flow rate from the JCSD to the plant is projected to be 5.7 mgd based on the projections in the 2007 Master Sewer Plan Addendum. The JCSD has a proposed project in its 20-year Capital Improvement Program to obtain additional treatment capacity (JCSD 2011, p. 57).

Solid Waste

Waste Management provides solid waste services to the project site. Solid waste collected in northwestern Riverside County is taken to one of three sanitary landfills: Badlands, El Sobrante, or Lamb Canyon. A summary of the capacity of these landfills is shown in **Table 2.1-18** below. The Robert A. Nelson Transfer Station is used by waste haulers in the region to reduce the loads and distances necessary to transport waste to sanitary landfills.

The Badlands Landfill is a regional municipal solid waste landfill that is owned and operated by Riverside County. The landfill has a total estimated permitted capacity of 33,560,993 cubic yards with a remaining estimated capacity of 14,730,025 cubic yards, or 49.3 percent of the permitted capacity. The landfill has an estimated closure year of 2024 (CalRecycle 2015).

The El Sobrante Landfill is a Riverside County regional municipal solid waste landfill located at 10910 Dawson Canyon Road. The landfill is privately owned and operated by USA Waste Services of California, Inc., a subsidiary of Waste Management, Inc. The landfill has a total estimated permitted capacity of 184,930,000 cubic tons and an estimated remaining capacity of 145,530,000 cubic tons, or 78.7 percent of the total permitted capacity. The landfill has an estimated closure year of 2045 (CalRecycle 2015).

The Lamb Canyon Landfill, owned and operated by Riverside County, is located between the cities of Beaumont and San Jacinto. The landfill has a total estimated permitted capacity of 33,560,993 cubic yards with a remaining estimated capacity of 18,955,000 cubic yards, or 55.3 percent of the total permitted capacity. The landfill has an estimated closure year of 2021 (CalRecycle 2015).

TABLE 2.1-18
LANDFILL CAPACITY SUMMARY

Landfill	Location	Maximum Permitted Capacity	Remaining Permitted Capacity	Estimated Closure Date
Badlands	31125 Ironwood Avenue Moreno Valley	33,560,993 cubic yards	14,730,025 cubic yards	2024
El Sobrante	10910 Dawson Canyon Rd. Corona	184,930,000 tons	145,530,000 tons	2045
Lamb Canyon	16411 State Hwy 79 Beaumont	33,041,000 cubic yards	18,955,000 cubic yards	2021

Source: CalRecycle 2015

Electricity and Natural Gas

Electrical Service

Southern California Edison (SCE) has an existing electricity distribution network that includes over 700 substations, 104,000 miles of circuits, and 1.5 million poles that deliver electricity to nearly 14 million homes and businesses in Southern California, including Eastvale. SCE is currently in the process of expanding and upgrading its transmission and distribution networks to meet the region's growing demand for electricity and to improve grid performance, while meeting California's renewable-power goals (SCE 2015).

SCE currently provides electrical service to the Master Plan area; properties surrounding the project site have already been developed and are served by existing SCE electrical infrastructure.

Natural Gas Service

Southern California Gas Company provides natural gas service to a service territory that encompasses approximately 20,000 square miles throughout Central and Southern California, including Eastvale. It is the nation's largest natural gas distribution utility, providing energy to 21.4 million consumers through 5.9 million meters in more than 500 communities (Southern California Gas Company 2015).

2.1 EXISTING SETTING

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2.2 REGULATORY FRAMEWORK

The proposed Leal Master Plan and all subsequent development plans and/or projects submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area would be subject to compliance with all applicable federal, state, and local laws, regulations, ordinances, etc. This section summarizes the regulatory framework that may apply to the proposed Master Plan and subsequent projects for each issue area, specifically focusing on the regulations intended to reduce or eliminate adverse effects on the environment. It should be noted that this section is not intended to be an all-inclusive list of regulatory agencies with jurisdiction over the project, nor does it constitute a comprehensive list of all regulations with which future development projects must comply. Depending on the timing of future development in the Leal Master Plan area, new regulations or agencies could be in place or those listed here could be outdated or replaced. The discussion contained herein is intended to supplement the impact analysis discussions contained in Sections 3.1 through 3.13 of this Draft EIR.

2.2.1 CITY OF EASTVALE GENERAL PLAN

The following Eastvale General Plan policies and actions would be applicable to the proposed project. The project does not include any components that conflict with these General Plan policies; however, final authority for interpretation of a policy statement and determination of the project’s consistency with the General Plan ultimately rests with the Eastvale City Council.

**TABLE 2.2-1
GENERAL PLAN POLICIES**

GP Policy Number	GP Policy Text
Land Use Policies	
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-19	Leal Property – In this area, the City supports the development of a mixed-use project in cooperation with the property owner/developer. Potential uses to be considered include: <ul style="list-style-type: none"> • Retail • Office • Civic • Hotel • Multi-family residential • Recreation/Entertainment Actual planned land uses will be determined at a future date.
Policy LU-22	Require that commercial projects abutting residential properties protect the residential use from the nuisance impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.
Policy LU-23	Provide sufficient commercial and industrial development opportunities in order to increase local employment levels and reduce vehicle trips.
Policy LU-26	Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses.
Policy LU-27	The positive characteristics and unique features of the project site and surrounding community should be considered during the design and development process.
Policy LU-29	Employment and service uses should be located in areas that are easily accessible to existing or planned transportation facilities.

2.2 REGULATORY FRAMEWORK

GP Policy Number	GP Policy Text
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 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 LU-32	Adequate and available circulation facilities, water supplies, and sewer facilities should be available to meet service demands as development occurs.
Circulation and Infrastructure Policies	
Policy C-2	New roadways within the Circulation Plan (Figure C-1) shall be consistent with Table C-1.
Policy C-3	The cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees.
Policy C-10	Seek to 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-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-28	Promote and encourage efficient provisions of utilities such as water, wastewater, natural gas, and electricity that support the Land Use Map.
Design Policies	
Policy DE-2	All new development shall adhere to the basic principles of high-quality urban design, architecture, and landscape architecture including, but not limited to, human-scaled design, pedestrian orientation, interconnectivity of street layout, and siting major buildings to hold corners and readily define entryways, gathering points, and landmarks.
Policy DE-4	Site layout and building design shall take into consideration Eastvale's climate by including trees, landscaping, and architectural elements to provide shade.
Policy DE-5	New development shall be approved only if it is consistent with the design principles set forth in this Design Chapter and to any local, project-specific, or citywide design guidelines.
Policy DE-7	All new development projects which require development plan approval shall establish landscape and façade maintenance programs for the first three years to ensure that streetscapes and landscape areas are installed and maintained as approved.
Policy DE-11	Public art (statues, sculpture, fountains, and monuments) and other design features should be used to enliven the public realm in private development projects.
Policy DE-14	Soundwalls or fences along streets other than urban arterials and major or secondary highways should be used only if no other feasible design solutions are available for reducing the impact of roadway noise on residential areas, consistent with this General Plan's policies regarding noise mitigation.
Policy DE-15	Where soundwalls are used, they shall include design features that enhance visual interest and be landscaped in order to mitigate their impact on urban character and the pedestrian environment.
Policy DE-17	Public and private development of all kinds should create safe, inviting, and functional pedestrian and cyclist environments through a variety of techniques, including: <ul style="list-style-type: none"> • Planting trees to provide shade on pedestrian paths, sidewalks, and walkways; • Safe, separated pedestrian walkways; • Safe, visible bicycle parking;

GP Policy Number	GP Policy Text
	<ul style="list-style-type: none"> • Shaded walkways; and • Wide sidewalks.
Policy DE-18	Site buildings along sidewalks, pedestrian areas, and bicycle routes and include amenities that encourage pedestrian activity.
Policy DE-19	Commercial developments should have public open space areas such as plazas, courtyards, expanded walkways, or other areas suitable for small gatherings. The facilities should be sized proportionate to the scale of the development.
Policy DE-20	To encourage pedestrian travel, sidewalks should be provided on both sides of the street in commercial and residential areas, and where appropriate in industrial areas.
Policy DE-21	Non-residential building entrances shall provide easy, attractive accessibility to pedestrian walkways and pathways.
Policy DE-22	Buildings shall include human-scale details such as windows facing the street, awnings, and architectural features that create a visually interesting pedestrian environment.
Policy DE-23	Parking lots shall be landscaped (such as with shade trees) to create an attractive pedestrian environment and reduce the impact of heat islands.
Policy DE-24	Safe and well-defined pedestrian connections from buildings to parking areas, from buildings to the adjoining street(s), and among buildings on the same site shall be provided. Pedestrian connections between commercial development and surrounding residential neighborhoods shall also be provided where feasible and desirable. Enhanced paving materials or other techniques shall be used to identify pedestrian connections.
Policy DE-25	New development and public projects should create streetscape designs with themes that are oriented toward and inviting to pedestrians and cyclists.
Policy DE-26	Residential units/projects shall be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.
Policy DE-27	New development projects should be designed on a traditional or curvilinear grid street system. Cul-de-sacs may only be used within the grid so long as the objective of pedestrian and bicycle connectivity is achieved.
Policy DE-28	In residential developments, the exterior of buildings shall be varied and articulated to provide visual interest to the streetscape.
Policy DE-29	The exterior of residential buildings shall reflect attention to detail as necessary to produce high architectural design and construction quality. Where side and/or rear exterior elevations of residential buildings are visible from any public street or right-of-way, they shall incorporate architectural treatments in keeping with the front (primary) elevation.
Policy DE-31	Where multi-story housing units are proposed adjacent to existing or planned single-family residential homes, building elevations and the location of windows, balconies, and air conditioning units above the first story shall be designed to ensure visual compatibility and residential privacy.
Policy DE-33	Require residential projects to be designed to maximize integration with, and safe connectivity to, nearby retail centers, parks, and other community features.
Policy DE-34	Non-residential developments shall be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.
Policy DE-35	Commercial, industrial, and public projects shall be designed to minimize the visibility of parked vehicles from public streets. Where possible, parking lots shall be located behind or on the side of buildings to reduce their visual impact.
Policy DE-36	Heavy truck and vehicular access shall be designed to minimize potential impacts on adjacent properties.

2.2 REGULATORY FRAMEWORK

GP Policy Number	GP Policy Text
Policy DE-37	When more than one structure is on a commercial or other non-residential site, they should be linked visually through architectural style, colors and materials, signage, landscaping, design details such as light fixtures, and the use of arcades, trellises, or other open structures.
Policy DE-38	Unarticulated, “boxy” structures shall be broken up by creating horizontal emphasis through the use of trim, varying surfaces, awnings, eaves, or other ornamentation and by using a combination of complementary colors.
Policy DE-39	Buildings should feature outdoor use areas such as plazas and open air seating in cafes and restaurants wherever possible.
Policy DE-40	Loading facilities for uses requiring delivery from large trucks shall be screened from public view and located away from residential uses, and their impacts should be appropriately mitigated.
Policy DE-41	Design parking lots and structures to be functionally and visually integrated and connected.
Policy DE-42	Parking lots shall be screened and separated into smaller units with landscaping or low walls.
Policy DE-43	Parking for alternative modes of transportation, such as preferential parking for carpool/vanpool, motorcycles or alternative fuel vehicles, and bicycles, should be incorporated into parking plans for major commercial development projects. Transit plazas may be required to be incorporated into significant projects.
Policy DE-44	All outdoor storage areas shall be visually screened with attractive fencing/walls and landscaping.
Policy DE-48	Building signs shall be integrated into the overall design of buildings and complement the architecture. All signs shall be compatible with the building and site design relative to colors, materials, and placement. Action DE-48.1: Require all commercial developments to provide a Master Sign Plan defining design, size, and location standards for all signs in the development.
Policy DE-49	Non-residential developments shall include consistent and well-designed signage that is integrated with the architectural character of each building.
Air Quality and Conservation Policies	
Policy AQ-3	Reduce vehicle miles traveled and motor vehicle emissions through local job creation.
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.
Policy AQ-19	Analyze and mitigate, to the extent feasible, potentially significant increases in greenhouse gas emissions during project review, pursuant to the California Environmental Quality Act.
Policy AQ-32	Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
Policy AQ-34	The City shall review all development proposals to ensure that all services and utilities can be provided in an energy-efficient and effective manner.
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.
Healthy Community Policies	
Policy HC-8	Neighborhood retail, service, and public facilities should be located within walking distance of residential areas.

GP Policy Number	GP Policy Text
Noise Policies	
Policy N-2	Continue to work with other agencies such as Caltrans and school districts to ensure that newly proposed facilities do not negatively affect existing noise sensitive land uses.
Policy N-3	<p>Consider the following uses to be sensitive to noise and vibration, and discourage these uses in areas where existing or projected future noise levels would be in excess of 65 CNEL and/or vibration would be more than 0.0787 Peak Particle Velocity (inches/second):</p> <ul style="list-style-type: none"> • Schools; • Hospitals; • Rest Homes; • Long Term Care Facilities; • Mental Care Facilities; • Residential Uses; • Libraries; • Passive Recreation Uses; and • Places of Worship
Policy N-4	Require noise sensitive land uses proposed in areas where existing or projected future noise levels would be in excess of 65 CNEL to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.
Policy N-6	Mitigate exterior noise to the levels shown in Table N-3 to the extent feasible.
Policy N-7	Table N-4 provides the City’s standards for maximum exterior non-transportation noise levels to which land designated for residential land uses may be exposed for any 30-minute period on any day. Where existing ambient noise levels exceed these standards, the ambient noise level shall be highest allowable noise level as measured in dBA Leq (30 minutes).
Policy N-8	The noise levels specified in Policy N-7 shall be lowered by 5 dB for simple tonal noises (such as humming sounds), noises consisting primarily of speech or music, or for recurring impulsive noises (such as pile drivers, punch presses, and similar machinery). Example: the Single Family/Duplex standard from 10 p.m. to 7 a.m. for these types of noises is 45 dBA.
Policy N-11	Developers of new residential or other noise-sensitive uses which are placed in environments subject to existing or projected noise that exceeds the “completely compatible” guidelines in Table N-3: Noise Compatibility by Land Use Designation shall be responsible for ensuring that acceptable exterior and interior noise levels will be achieved.
Policy N-12	<p>The City’s preferences for providing noise mitigation are, in order of preference (#1 is most preferred; #5 is the least):</p> <ol style="list-style-type: none"> 1) Reduce noise at the source. 2) If #1 is not practical, designate land uses which are compatible with projected noise levels. 3) If #1 or #2 are not practical, use distance from the source to reduce noise to acceptable levels. 4) If #1, #2, or #3 are not practical, use buildings, berms, or landscaping or a combination of these to reduce exterior noise to acceptable levels. Use construction techniques (sound-reducing windows, insulation, etc.) to reduce interior noise to acceptable levels. 5) The last measure which should be considered is the use of a sound wall to reduce noise to acceptable levels.
Policy N-16	Require that parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize potential noise impacts on adjacent noise sensitive land uses.

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GP Policy Number	GP Policy Text
Policy N-17	If noise levels in Table N-4 exceed, or are projected to be exceeded as a result of the proposed commercial or industrial loading dock or delivery area, require delivery hours be limited when adjacent to noise-sensitive land uses.
Policy N-18	Natural buffers, setbacks or other noise attenuation shall be established between freeways and urban arterial roadways and adjoining noise-sensitive areas. Action N-18.1: Employ noise mitigation practices when designing all future streets and highways, and when improvements occur along existing highway segments.
Policy N-22	Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.
Policy N-23	Condition subdivision and other land development approval adjacent to developed/occupied noise-sensitive land uses to require the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as: a) Temporary noise attenuation fences; b) Preferential location of equipment; c) Length of equipment use and idling time; and, d) Use of current noise suppression technology and equipment.
Policy N-24	Require that all construction equipment be kept properly tuned and use noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
Policy N-25	Development should use natural barriers such as berms, setbacks and/or dense vegetation to assist in noise reduction.
Policy N-27	Noise reduction measures shall be included in the design of new development through measures which may include: • Separation of noise-sensitive buildings from noise-generating sources; • Use of natural topography and intervening structures to shield noise-sensitive land uses; and • Adequate sound proofing of noise sources or receptor structures to maintain desired interior noise levels.
Policy N-28	Require that commercial and residential mixed-use structures minimize the transfer or transmission of noise and vibration from the commercial land use to the residential land use through appropriate building technologies.
Park, Recreation, and Open Space Policies	
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-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. Action OS-5.1: As part of the review of development projects, ensure that public parks and trails are provided which meet the City's criteria and which implement the City's Parks and Trails Master Plan (once it has been adopted). Action OS-5.2: Coordinate with the JCSD and the JARPD in the review of residential developments requiring parks and recreation facilities.

GP Policy Number	GP Policy Text
Policy OS-6	<p>New residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of 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.</p> <p>Action OS-6.1: The City will adopt standards designating which types of lands shall be considered “parks” for the purpose of implementing Quimby Act requirements.</p>
Safety Policies	
Policy S-2	<p>All new development shall be designed and constructed to conform with the Building Code and other applicable codes and other safety standards related to seismic and geologic hazards.</p> <p>Action S-2.1: Require geological and geotechnical investigations in areas with potential for seismically induced liquefaction or settlement as part of the environmental and development review process, for any structure proposed for human occupancy, and for any structure whose damage would cause harm.</p>
Policy S-6	<p>All residential, commercial, and industrial structures shall be flood-proofed from the 200-year storm flow, and the finished floor elevation shall be constructed at such a height as to meet this requirement.</p>
Policy S-10	<p>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.</p>
Policy S-20	<p>The City shall work with the Riverside County Fire Department to ensure the safety and protection of Eastvale and its community members.</p> <p>Action S-20.1: The City will work with the County Fire Department through the review of proposed development projects to ensure that fire safety issues are considered.</p>
Policy S-21	<p>The City shall ensure the safety and protection of Eastvale and its community members by providing appropriate first response to emergencies and ensuring that sufficient resources are available to provide adequate protection as the community grows.</p> <p>Action S-21.1: The City will maintain and enhance community safety through coordinated regional emergency, law-enforcement, and protective services systems.</p> <p>Action 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 prior to construction and occupancy.</p>
Policy S-23	<p>The City encourages the design of neighborhoods and buildings in a manner that discourages crime and promotes security and safety for people and property. Please see the Design Chapter of this General Plan for additional policies related to the design of neighborhoods and buildings.</p>
Policy S-24	<p>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:</p> <p><i>Natural Surveillance</i></p> <p>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.</p> <p><i>Territorial Reinforcement</i></p> <p>Physical design can create or extend the area in which users develop a sense of territorial</p>

2.2 REGULATORY FRAMEWORK

GP Policy Number	GP Policy Text
	<p>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.</p> <p><i>Natural Access Control</i></p> <p>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.</p> <p><i>Target Hardening</i></p> <p>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</p>

2.2.2 TRANSPORTATION AND TRAFFIC

STATE

California Department of Transportation (Caltrans)

Caltrans policies are applicable to Interstate 15 (I-15) and State Route (SR) 60 and are summarized in the Caltrans (2002) *Guide for the Preparation of Traffic Impact Studies*. These guidelines identify when a traffic impact study is required, what should be included in the study, analysis scenarios, and guidance on acceptable analysis methodologies. Caltrans endeavors to maintain a target service level of service (LOS) C on state highway facilities. However, this may not always be feasible and it is recommended that the lead agency consult with Caltrans to determine the appropriate target level of service. For the purposes of this Draft EIR, LOS C is considered the minimum acceptable operating level for Caltrans-controlled facilities (SR 60 roadway segments, I-15 roadway segments).

REGIONAL

Riverside County Congestion Management Program

The Riverside County Congestion Management Program (CMP) has established a minimum threshold of LOS E for CMP streets and highways, which include SR 60, I-15, and Limonite Avenue in the vicinity of the project site. When the level of service on a segment or at an intersection fails to attain this established level of service standard, a deficiency plan must be prepared by the local jurisdiction where the deficiency is identified. However, deficient segments are identified through a biennial traffic monitoring process; neither the CMP nor the Riverside County Transportation Commission (RCTC) requires traffic impact assessments for individual development proposals. To ensure that the CMP is appropriately monitored to reduce the occurrence of level of service deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMP System. According to the RCTC, local agencies are required to maintain minimum level of service thresholds included in their respective general plans and require traffic impact assessments on development proposals when necessary.

Measure A

Measure A is a transportation financing program in Riverside County established by voters in 1988. The program is administered by the RCTC, which distributes the proceeds of a half-cent sales tax for transportation to each of three districts—Western Riverside County, the Coachella Valley, and Palo Verde—based on a per capita formula, with a specific amount to be spent on road maintenance and a specific amount to be spent on capital improvements. In 2002, Measure A was extended by Riverside County voters to continue to fund transportation improvements through 2039. The RCTC has programmed the addition of one lane in each direction of Interstate 15 from SR 60 to the San Diego County line as a 2009–2039 Measure A Programmed Project (RCTC 2015).

Transportation Uniform Mitigation Fee

The Transportation Uniform Mitigation Fee (TUMF) is a regional program which ensures that new development pays its fair share for the increased traffic it creates by requiring developers of residential, industrial, and commercial property to pay a development fee to fund transportation projects that will be required as a result of the growth the projects create. The Western Riverside Council of Governments (WRCOG) administers the TUMF and the City of Eastvale requires payment of the TUMF prior to issuance of a building permit. As administrator, WRCOG receives all fees generated from the Transportation Uniform Mitigation Fee. WRCOG invests, accounts for, and expends the fee in accordance with the TUMF ordinance, the administrative plan, and applicable state laws. Participating jurisdictions in western Riverside County are responsible for collecting the fees on new development within their jurisdictions.

The TUMF program distinguishes between transportation improvements and trip-making in five geographic zones (Central, Hemet/San Jacinto, Northwest, Pass, and the Southwest), regional transportation improvements, and regional transit improvements. Eastvale, and thus the project site, is in the Northwest zone. After administrative costs and Multiple Species Habitat Conservation Plan (MSHCP) mitigation allocations are extracted from the revenues collected, WRCOG allocates revenues as follows: 46.39 percent for regional improvements programmed by the RCTC; 46.39 percent to the zones for projects that are proposed, and after approval, implemented by local jurisdictions; and 1.64 percent for regional transit projects prioritized by the Riverside Transit Authority.

LOCAL

Development Impact Fee Program

The City's development impact fee program, imposed by Chapter 110.28 of the City's Municipal Code pursuant to the Mitigation Fee Act and California Government Code Section 66000 et seq., requires proponents of new development to pay development impact fees. The development impact fee program includes three components, one of which is a Transportation Facilities component to ensure that new development in Eastvale pays its proportionate share of the capital investments necessary to provide traffic amenities meeting the City's standards. Fees collected are held separately and are used for the purpose of funding eligible capital improvement projects; these fees are not used to fund ongoing operations and maintenance of transportation facilities. The fees are utilized as needed to construct improvements necessary to maintain the required level of service on area roadways.

2.2 REGULATORY FRAMEWORK

2.2.3 AIR QUALITY

Ambient Air Quality Standards

Future development resulting from the proposed project has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, development activities under the proposed project entitlements fall under the ambient air quality standards promulgated at the local, state, and federal levels. The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the US Environmental Protection Agency (EPA). The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by the California Air Resources Board (CARB). Implementation of the project would occur in the South Coast Air Basin (SoCAB), which is under the air quality regulatory jurisdiction of the Southern California Air Quality Management District (SCAQMD) and is subject to the rules and regulations adopted by the air district to achieve the national and state 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 ambient air quality standards for six air pollutants. As shown in **Appendix 3.3-C**, these pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀ and 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.

2.2.4 CLIMATE CHANGE

STATE

California has adopted various administrative initiatives and also enacted a variety of legislation relating to climate change, much of which sets aggressive goals for greenhouse gas (GHG) emissions reductions in the state. However, none of this legislation provides definitive direction regarding the treatment of climate change in environmental review documents prepared under the California Environmental Quality Act (CEQA). In particular, the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or specific thresholds of significance and do not specify GHG reduction mitigation measures. Instead, the guidelines allow lead agencies to choose methodologies and make significance determinations based on substantial evidence, as discussed in further detail below. In addition, no state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating significant effects in CEQA documents. Thus, lead agencies exercise their discretion in determining how to analyze GHGs. The primary acts that have driven GHG regulation and analysis in California include California Executive Order S-03-05 (2005) and 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). California Executive Order S-03-05 (2005) mandates a reduction of GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Although the 2020 target has been incorporated into legislation (AB 32), the 2050 target remains only a goal of the Executive Order. The California Global Warming Solutions Act of 2006 (AB 32) instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a greenhouse gas emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020 (1990 levels have been estimated to equate to 15 percent below 2005 emission levels). Based on CARB’s calculations of emissions levels, California must reduce GHG emissions by approximately 15 percent below 2005 levels to achieve this goal.

AB 32 Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of Assembly Bill (AB) 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California’s GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as “business as usual”). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of year 2013. The key elements of the Scoping Plan include (CARB 2008):

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California’s GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California’s clean car standards, heavy-duty truck measures, and the Low Carbon Fuel Standard.
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California’s long-term commitment to AB 32 implementation.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relies on emissions projections updated in light of current economic forecasts that account for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This reduced the projected 2020 emissions from 596 million metric tons (MMT) carbon dioxide equivalent (CO₂e) to

2.2 REGULATORY FRAMEWORK

545 MMTCO_{2e}. The reduction in projected 2020 emissions means that the revised business-as-usual (BAU) reduction necessary to achieve AB 32’s goal of reaching 1990 levels by 2020 is now 21.7 percent. CARB also provided a lower 2020 inventory forecast that took credit for certain State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from BAU needed to achieve the goals of AB 32 is approximately 16 percent.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal established in Executive Order S-3-05, though not yet adopted as state law, and observes that “a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal.” The Scoping Plan update does not establish or propose any specific post-2020 goals, but identifies such goals adopted by other governments or recommended by various scientific and policy organizations. **Table 2.2-2** provides a brief overview of the other California legislation relating to climate change that may affect the emissions associated with the proposed project.

**TABLE 2.2-2
CALIFORNIA STATE CLIMATE CHANGE LEGISLATION**

Legislation	Description
Assembly Bill 1493 and Advanced Clean Cars Program	Assembly Bill 1493 (“the Pavley Standard,” or AB 1493, 2005) (Health and Safety Code Sections 42823 and 43018.5) aimed to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO _{2e} emissions and 75 percent fewer smog-forming emissions.
Low Carbon Fuel Standard (LCFS)	Executive Order S-01-07 (2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California. The regulation took effect in 2010 and is codified at Title 17, California Code of Regulations, Sections 95480–95490. The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020.
Renewables Portfolio Standard (RPS) (Senate Bill X1-2)	California’s RPS requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. As an interim measure, the RPS requires 25 percent of retail sales to be sourced from renewable energy by 2016.
Senate Bill (SB) 375	SB 375 (codified in the Government Code and Public Resources Code), took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires metropolitan planning organizations (MPOs) to incorporate a Sustainable Communities Strategy (SCS) in their Regional Transportation Plans that will achieve GHG emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities. The MPO with jurisdiction in Eastvale is the Western Riverside Council of Government (WRCOG) in association with the Southern California Association of Governments (SCAG). On September 23, 2010, CARB adopted regional targets for the reduction of CO _{2e} applying to the years 2020 and 2035 (CARB 2011). For the area under WRCOG’s jurisdiction, including Eastvale, CARB adopted regional targets for reduction of GHG emissions by 9 percent for 2020 and by 16 percent for 2035.

Legislation	Description
California Building Energy Efficiency Standards	In general, the California Building Energy Efficiency Standards require the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The California Energy Commission recently adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1 (collectively referred to here as the standards). The amended standards took effect in the summer of 2014. The 2013 Building Energy Efficiency Standards are 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.
California Green Building Standards	In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]). CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. CALGreen requires energy conservation measures for new buildings and structures.

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 and 21159.28 and Chapter 4.2.

2.2.5 AESTHETICS, LIGHT, AND GLARE

CITY OF EASTVALE MUNICIPAL CODE

Section 120.05.050, Outdoor Lighting, in Chapter 120.05, Development Standards, of the Eastvale Municipal Code, regulates all outdoor lighting fixtures for new multifamily residential, commercial, industrial, mixed use and public/quasi-public uses in order to prevent any measurable impact on abutting property or views from the street right-of-way. The standards include requiring all outdoor lighting to be constructed with full shielding and/or recessed to reduce light trespass to adjoining properties and requiring each fixture to be directed downward and away from adjoining properties and public rights-of-way, so that no light fixture directly illuminates an area outside of the site. The requirements also specify that outdoor lighting be designed to illuminate at the minimum level necessary for safety and security and to avoid the harsh contrasts in lighting levels between the project site and adjacent properties.

CITY OF EASTVALE DESIGN STANDARDS AND GUIDELINES

The Eastvale Design Standards and Guidelines contain a comprehensive set of design standards and guidelines for residential and nonresidential development to implement the goals and policies of the Eastvale General Plan. The standards and guidelines illustrate the minimum quality of site planning and architectural design to create a desirable community and to ensure compatibility with the overall character of Eastvale.

2.2.6 NOISE

City of Eastvale Municipal Code

Chapter 8.52, Noise Regulation, of the City of Eastvale Municipal Code sets sound level standards for General Plan land use designations and prohibits the creation of noise that causes the exterior sound level on any other occupied property to exceed those sound level standards.

2.2 REGULATORY FRAMEWORK

2.2.7 BIOLOGICAL RESOURCES

FEDERAL

Endangered Species Act

The Endangered Species Act of 1973 (ESA), as amended, provides protective measures for federally listed threatened and endangered species, including their habitats, from unlawful take (16 United States Code (USC) Sections 1531–1544). The ESA defines “take” to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Title 50, Part 222, of the Code of Federal Regulations (50 CFR Section 222) further defines “harm” to include “an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns including feeding, spawning, rearing, migrating, feeding, or sheltering.”

ESA Section 7(a)(1) requires federal agencies to utilize their authority to further the conservation of listed species. ESA Section 7(a)(2) requires consultation with the US Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) if a federal agency undertakes, funds, permits, or authorizes (termed the federal nexus) any action that may affect endangered or threatened species, or designated critical habitat. For projects that may result in the incidental “take” of threatened or endangered species, or critical habitat, and that lack a federal nexus, a Section 10(a)(1)(b) incidental take permit can be obtained from the USFWS and/or the NMFS.

Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC Sections 703–711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Section 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR Section 21). The majority of birds found in the project vicinity would be protected under the MBTA.

Bald and Golden Eagle Protection Act

The bald eagle and golden eagle are federally protected under the Bald and Golden Eagle Protection Act (16 USC Sections 668–668c). Under the act, it is illegal to take, possess, sell, purchase, barter, offer to sell or purchase or barter, transport, export, or import at any time or in any manner a bald or golden eagle, alive or dead; or any part, nest or egg of these eagles unless authorized by the Secretary of the Interior. Violations are subject to fines and/or imprisonment for up to one year. Active nest sites are also protected from disturbance during the breeding season.

Executive Order 13112 – Invasive Species

This executive order directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the proposed action, the USFWS and the US Army Corps of Engineers (USACE) would issue permits and therefore would be responsible for ensuring that the proposed action complies with Executive Order 13112 and does not contribute to the spread of invasive species.

STATE**California Endangered Species Act**

Under the California Endangered Species Act (CESA), the California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of endangered and threatened species (Fish and Game Code [FGC] Section 2070). The CDFW also maintains a list of "candidate species," which are species formally noticed as being under review for potential addition to the list of endangered or threatened species, and a list of "species of special concern," which serve as a species "watch lists."

Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under FGC Section 206.591. Authorization from the CDFW would be in the form of an incidental take permit.

California Fish and Game CodeNative Plant Protection Act

The Native Plant Protection Act (FGC Sections 1900–1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered (as defined by the CDFW). An exception in the act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give that state agency at least 10 days to retrieve the plants before they are plowed under or otherwise destroyed (FGC Section 1913). Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

Birds of Prey

Under FGC Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

"Fully Protected" Species

California statutes also afford "fully protected" status to a number of specifically identified birds, mammals, reptiles, and amphibians. These species cannot be "taken," even with an incidental take permit. FGC Section 3505 makes it unlawful to take "any egret or egret, osprey, bird of paradise, goura, numidi, or any part of such a bird. FGC Section 3511 protects from take the following fully protected birds: (a) American peregrine falcon (*Falco peregrinus anatum*); (b) brown pelican (*Pelecanus occidentalis*); (c) California black rail (*Laterallus jamaicensis coturniculus*); (d) California clapper rail (*Rallus longirostris obsoletus*); (e) California condor (*Gymnogyps californianus*); (f) California least tern (*Sterna albifrons browni*); (g) golden eagle;

2.2 REGULATORY FRAMEWORK

(h) greater sandhill crane (*Grus canadensis tabida*); (i) light-footed clapper rail (*Rallus longirostris levipes*); (j) southern bald eagle (*Haliaeetus leucocephalus leucocephalus*); (k) trumpeter swan (*Cygnus buccinator*); (l) white-tailed kite (*Elanus leucurus*); and (m) Yuma clapper rail (*Rallus longirostris yumanensis*).

FGC Section 4700 identifies the following fully protected mammals that cannot be taken: (a) Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*); (b) bighorn sheep (*Ovis canadensis*), except Nelson bighorn sheep (subspecies *Ovis canadensis nelsoni*); (c) northern elephant seal (*Mirounga angustirostris*); (d) Guadalupe fur seal (*Arctocephalus townsendi*); (e) ring-tailed cat (genus *Bassariscus*); (f) Pacific right whale (*Eubalaena sieboldi*); (g) salt-marsh harvest mouse (*Reithrodontomys raviventris*); (h) southern sea otter (*Enhydra lutris nereis*); and (i) wolverine (*Gulo gulo*).

FGC Section 5050 protects from take the following fully protected reptiles and amphibians: (a) blunt-nosed leopard lizard (*Crotaphytus wislizenii silus*); (b) San Francisco garter snake (*Thamnophis sirtalis tetrataenia*); (c) Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*); (d) limestone salamander (*Hydromantes brunus*); and (e) black toad (*Bufo boreas exsul*).

FGC Section 5515 identifies certain fully protected fish that cannot lawfully be taken, even with an incidental take permit. The following species are protected in this fashion: (a) Colorado River squawfish (*Ptychocheilus lucius*); (b) thicktail chub (*Gila crassicauda*); (c) Mohave chub (*Gila mohavensis*); (d) Lost River sucker (*Catostomus luxatus*); (e) Modoc sucker (*Catostomus microps*); (f) shortnose sucker (*Chasmistes brevirostris*); (g) humpback sucker (*Xyrauchen texanus*); (h) Owens River pupfish (*Cyprinodon radiosus*); (i) unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*); and (j) rough sculpin (*Cottus asperimus*).

NONGOVERNMENTAL AGENCY

California Native Plant Society

The California Native Plant Society (CNPS) is a nongovernmental agency that classifies native plant species according to current population distribution and threat level in regard to extinction. These data are utilized by the CNPS to create/maintain a list of native California plants that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2015). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

The following identifies the definitions of the CNPS listings:

List 1A: Plants believed to be extinct

List 1B: Plants that are rare, threatened, or endangered in California and elsewhere

List 2: Plants that are rare, threatened, or endangered in California, but are more numerous elsewhere

All of the plant species on List 1 and 2 meet the requirements of the Native Plant Protection Act Section 1901, Chapter 10, or FGC Section 2062 and Section 2067 and are eligible for state listing. Plants appearing on List 1 or 2 are considered to meet the criteria of CEQA Section 15380, and effects on these species are considered "significant." Classifications for plants on List 3 (plants

about which more information is needed) and/or List 4 (plants of limited distribution), as defined by the CNPS, are not currently protected under state or federal law.

LOCAL

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP is a comprehensive, multijurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in western Riverside County. This plan is one of several large, multijurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal endangered species acts. The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (16 USC 1531 et seq.), as well as a natural community conservation plan under the Natural Community Conservation Plan Act of 2001 (Fish and Game Code, Section 2800 et seq.). The MSHCP allows the participating jurisdictions to authorize "take" of plant and wildlife species identified within the plan area. The USFWS and the CDFW have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the wildlife agencies have granted "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordinated MSHCP conservation area. The MSHCP is a criteria-based plan and does not rely on a hard-line preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells (Cells) or Cell Groupings, and flexible guidelines (criteria) for the assembly of conservation within the Cells or Cell Groupings. Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

2.2.8 CULTURAL RESOURCES

STATE

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

Historical resource is a term with a defined statutory meaning (PRC Section 21084.1 and State CEQA Guidelines Section 15064.5[a], [b]). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the National Register of Historic Places, as well as some California State Landmarks and Points of Historical Interest.

2.2 REGULATORY FRAMEWORK

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and California Code of Regulations, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process (PRC Section 5024.1[g]), lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (PRC Section 21084.1 and State CEQA Guidelines Section 15064.5[a][3]). Following CEQA Guidelines Section 21084.5(a) and (b), a historical resource is defined as any object, building, structure, site, area, place, record, or manuscript that:

- 1) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and
- 2) Meets any of the following criteria:
 - a. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
 - b. Is associated with the lives of persons important in our past;
 - c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d. Has yielded, or may be likely to yield, information important in prehistory or history.

Archaeological resources may also qualify as historical resources, and PRC Section 5024 requires consultation with the Office of Historic Preservation (OHP) when a project may impact historical resources located on State-owned land.

For historic structures, State CEQA Guidelines Section 15064.5(b)(3) indicates that a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall mitigate impacts to a level of less than significant. Potential eligibility also rests on the integrity of the resource. Integrity is defined as the retention of the resource’s physical identity that existed during its period of significance. Integrity is determined through considering the setting, design, workmanship, materials, location, feeling, and association of the resource.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. PRC Section 21083.2(g) states:

“Unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) *Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.*
- 2) *Has a special and particular quality such as being the oldest of its type or the best available example of its type.*
- 3) *Is directly associated with a scientifically recognized important prehistoric or historic event or person.*

Treatment options under Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

State CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult, in a timely manner, with the appropriate Native Americans, if any, as identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the mitigation provisions pertaining to accidental discoveries of human remains, the State CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to Section 15064.5(f), these provisions should include "an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place."

California Health and Safety Code

Section 7050.5(b) of the California Health and Safety code specifies protocol when human remains are discovered. The code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

2.2 REGULATORY FRAMEWORK

2.2.9 GEOLOGY, SOILS, AND AGRICULTURAL RESOURCES

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act is intended to reduce the risk to life and property from surface fault rupture during earthquakes by preventing the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as earthquake fault zones around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. There are no earthquake fault zones subject to the Alquist-Priolo Earthquake Fault Zoning Act in the area of the project site (CGS 2003).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act addresses nonsurface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The Seismic Hazards Mapping Act resulted in a mapping program that is intended to reflect areas that have the potential for liquefaction, landslide, strong earth ground shaking, or other earthquake and geologic hazards. The City of Eastvale is not affected by the Seismic Hazards Mapping Act and does not have an official seismic-hazard zone map (CGS 2015).

California Building Standards Code

The State of California provides minimum standards for building design through the California Building Standards Code (CBSC) (California Code of Regulations, Title 24). The CBSC is based on the Uniform Building Code (UBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions in California. State regulations and engineering standards related to geology, soils, and seismic activity in the UBC are reflected in the CBSC requirements. Through the CBSC, the State of California provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

California Department of Conservation

The Department of Conservation (DOC) 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 (FMMP). These programs are designed to preserve agricultural land and provide data on conversion of agricultural land to urban use. The DOC is responsible for approving Williamson Act Easement Exchange Program agreements.

Farmland Mapping and Monitoring Program

Under CEQA, the lead agency is required to evaluate agricultural resources in environmental assessments at least in part based on the FMMP. The state's system was designed to document how much agricultural land in California was being converted to nonagricultural land or

transferred into Williamson Act contracts. The definitions of important farmland types are provided in the Farmland Mapping and Monitoring Program discussion in Subsection 2.1, Existing Setting.

California Land Evaluation and Site Assessment Model

The California Land Evaluation and Site Assessment (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 CEQA.

LOCAL

City of Eastvale Development Standards

The City requires that all grading conform to Section 130.08.040, Street Grades, governing street grading in the city. The City requires that local streets not exceed 16 percent grades; in areas with an elevation of 5,000 feet or more, street grades must be 10 percent or less. Additionally, all development review (minor and major) is required to submit a landscaping grading plan.

Further, Chapter 110.60, Earthquake Fault Area Construction Regulations, codifies the requirements of the Alquist-Priolo Earthquake Fault Zoning Act (PRC Section 2621, et seq.) and the adopted policies and criteria of the State Mining and Geology Board requiring all permit applications to comply with the provisions set forth in the act.

2.2.10 HAZARDS AND HAZARDOUS MATERIALS

FEDERAL

Environmental Protection Agency

The US Environmental Protection Agency provides leadership in the nation's environmental science, research, education, and assessment efforts with the mission of protecting human health and the environment. The EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The EPA is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. The agency also performs environmental research, sponsors voluntary partnerships and programs, provides direct support through grants to state environmental programs, and advances educational efforts regarding environmental issues. The EPA develops and enforces regulations that span many environmental categories, including hazardous materials. Specific regulations include those regarding asbestos, brownfields, toxic substances, underground storage tanks, and Superfund sites, as discussed below.

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The CWA implemented pollution control programs such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters. The CWA also

2.2 REGULATORY FRAMEWORK

made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. The EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges.

Clean Air Act

The Clean Air Act is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the EPA to establish national ambient air quality standards to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, the act established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. Major sources are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. For major sources, Section 112 requires that the EPA establish emission standards requiring the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as maximum achievable control technology, or MACT standards. Eight years after the technology-based MACT standards are issued for a source category, the EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk (EPA 2015).

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from "cradle to grave," including the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes. The 1986 amendments to the act enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

The federal Hazardous and Solid Waste Amendments are the 1984 amendments to the RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (EPA 2015).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through this act, the EPA was given power to seek out those parties responsible for any release and ensure their participation in the cleanup. The EPA is authorized to implement CERCLA in all 50 states and in territories of the United States. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. The Superfund Amendments and Reauthorization Act of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definition clarifications, and technical requirements were added to the legislation, including additional enforcement authorities (EPA 2015).

Occupational and Safety Health Act

Congress passed the Occupational and Safety Health Act in 1970 to ensure worker and workplace safety. The goal was to ensure that employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. The Occupational Safety and Health Administration (OSHA) is a division of the US Department of Labor that oversees the administration of the act and enforces standards in all 50 states.

STATE

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991 by Governor's Executive Order. The six boards, departments, and office were placed under the CalEPA "umbrella" to create a cabinet-level voice for the protection of human health and the environment and to ensure the coordinated deployment of state resources. The mission of CalEPA is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality (CalEPA 2012). CalEPA and the State Water Resources Control Board establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Also, as required by Government Code Section 65962.5, CalEPA develops an annual update to the Hazardous Waste and Substances Sites (Cortese) List, which is a planning document used by the state, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following six environmental and emergency response programs (CalEPA 2012):

- Hazardous Waste Generator program and Hazardous Waste Onsite Treatment activities
- Aboveground Storage Tank program and Spill Prevention Control and Countermeasure Plan requirements

2.2 REGULATORY FRAMEWORK

- Underground Storage Tank program
- Hazardous Materials Release Response Plans and Inventory program
- California Accidental Release Prevention program
- Hazardous Materials Management Plans and Hazardous Materials Inventory Statement requirements

The Secretary of CalEPA is directly responsible for coordinating the administration of the Unified Program, which requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements in the county. Most CUPAs have been established as a function of a local environmental health or fire department.

The Riverside County Department of Environmental Health is the CUPA for the county, including Eastvale. CalEPA periodically evaluates the ability of each CUPA to carry out the requirements of the Unified Program. A program evaluation of the Riverside County Department of Environmental Health CUPA was conducted on October 18 and 19, 2011. The evaluation found that the Riverside County Department of Environmental Health CUPA's program performance is satisfactory with some improvement needed (CalEPA 2011).

California Air Resources Board

In 1967, the California Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus—the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board—to establish the California Air Resources Board. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problem. CARB's mission is to promote and protect public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants, while recognizing and considering the effects on the state's economy. CARB also oversees the activities of 35 local and regional air pollution control districts. These districts regulate industrial pollution sources, as well as issue permits, develop local plans to attain healthy air quality, and ensure that the industries in their area adhere to air quality mandates.

CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplements the Assembly Bill 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Under AB 1807, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" (Health and Safety Code Section 39666[f]). AB 1807 also requires CARB to use available information gathered from the AB 2588 program to include in the prioritization of compounds. This report includes available information on each of the above factors required under the mandates of the AB 1807 program.

California Department of Toxic Substances Control

The California Department of Toxic Substances Control regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. The DTSC regulates hazardous waste in California, primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. The US Environmental Protection Agency authorizes the DTSC to carry out the RCRA program in California. Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. The following are descriptions of the roles and responsibilities of the DTSC's organizational programs (DTSC 2015).

Site Mitigation and Brownfields Reuse Program

- **Statewide Cleanup Operations Division** – This DTSC division conducts and oversees cleanup of sites contaminated with a toxic substance, coordinating all aspects of the cleanup from investigation through certification. Expediting this cleanup work is one of the most important goals of the program. The DTSC created the Voluntary Cleanup Program, Expedited Remedial Action Pilot program, and other “Brownfields” tools to encourage redevelopment of blighted urban areas. The DTSC also encourages property owners to investigate and clean up contamination through a combination of low-interest loans. In 2001, the Investigating Site Contamination and Cleanup Loans and Environmental Assistance to Neighborhoods programs received 11 loan applications totaling \$7.9 million to investigate and clean up urban properties.
- **School Property Evaluation and Cleanup Division** – The division works to ensure that all new, existing, and proposed school sites are environmentally safe. State law requires all proposed school sites that will receive state funding for purchase or construction to go through the DTSC's rigorous environmental review. If the properties were previously contaminated, division staff makes sure they have been cleaned up to a level that is safe for students and faculty.
- **Office of Military Facilities** – The Office of Military Facilities is responsible for investigation, technical assistance, and oversight of cleanup operations at contaminated California properties currently or previously operated by the Department of Defense.
- **Emergency Response and Statewide Operations Division** – This DTSC division encompasses several elements. The Emergency Response Program provides immediate assistance in the case of sudden releases or threatened releases of hazardous materials. This program includes disaster response, illegal drug lab cleanup and development of remediation guidelines for illegal drug labs, and off-highway removal. The division also houses the Engineering and Geological Services Branch, which supports the other programs within the DTSC by providing expert technical assistance. The division has lead responsibility for conducting cleanup and enforcement actions at several high-profile federal Superfund sites.
- **Planning and Management Branch** – The branch is a headquarters organization responsible for developing and managing various federal grants that help fund the Site Mitigation and Brownfields Reuse Program. Staff analyzes state and federal legislation, develops policy and procedure, coordinates the annual work plan, and performs consolidated budget and personnel functions. In addition, the Site Mitigation and

2.2 REGULATORY FRAMEWORK

Brownfields Reuse program maintains a database of confirmed and suspected hazardous waste substance release sites.

Hazardous Waste Management Program

The Hazardous Waste Management Program regulates hazardous waste through its permitting, enforcement, and Unified Program activities. The program's main focus is to ensure the safe storage, treatment, transportation, and disposal of hazardous wastes.

- **Permitting & Corrective Action Division** – The division authorizes facilities to treat, store, and dispose of hazardous waste in a manner consistent with federal, state, and local laws. Types of authorization include permits, emergency permits, and variances. The purpose of this process is to ensure that these facilities and their operators meet requirements for safe operating conditions, financial assurance, and environmental monitoring. In addition, the division conducts the corrective action and closure programs, including long-term maintenance of closed facilities for closed hazardous waste facilities.
- **Statewide Compliance Division** – This division monitors hazardous waste transfer, storage, treatment, and disposal facilities for illegal activity. It also carries out a technical investigation program that provides sampling, technical site investigation, and expert testimony for civil and criminal investigations brought by the California Attorney General, district attorneys, regional environmental crimes task forces, and federal attorneys. Staff members conduct routine inspections, investigate complaints, monitor hazardous waste transporters and their manifests, and take enforcement action against those who violate hazardous waste laws. In addition, the division makes sure that commercial hazardous waste management facilities have adequate financial resources to cover both sudden accidental liability and the long-term costs of closing the facility.
- **State Regulatory Programs Division** – This division oversees the implementation of the hazardous waste generator and on-site treatment program, one of the six environmental programs at the local level consolidated within the Unified Program. It participates in the triennial review of 72 Certified Unified Program Agencies to ensure their programs are consistent statewide, conform to standards, and deliver quality environmental protection at the local level. The division also carries out the state's hazardous waste recycling and resource recovery program, a waste evaluation program to assist in waste determinations, and the household hazardous waste and agricultural chemical collection programs. The division conducts a corrective action oversight program that ensures any releases of hazardous constituents at generator facilities that conduct on-site treatment of hazardous waste are safely and effectively remediated.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) was created by the California Legislature in 1967. The mission of the SWRCB is to ensure the highest reasonable quality for waters of the State while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters.

Porter-Cologne Water Quality Control Act

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act, the cornerstone of today's water protection efforts in California. Through it, the SWRCB and the nine

Regional Water Quality Control Boards are entrusted with broad duties and powers to preserve and enhance all beneficial uses of the state's surface waters and groundwater.

Land Disposal Program

The SWRCB's Land Disposal program regulates waste discharge to land for treatment, storage, and disposal in waste management units, which include waste piles, surface impoundments, and landfills. CCR Title 23, Chapter 15, contains the regulatory requirements for hazardous waste. The regulations establish waste and site classifications and waste management requirements for waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities. The regulations also include minimum standards for proper management of each waste category. In addition, the regulations apply to cleanup and abatement actions for unregulated discharges to land of hazardous waste (e.g., spills).

California Department of Industrial Relations – Division of Occupational Safety and Health

In California, every employer has a legal obligation to provide and maintain a safe and healthful workplace for employees, according to the California Occupational Safety and Health Act of 1973. The Division of Occupational Safety and Health (Cal/OSHA) program is responsible for enforcing California laws and regulations pertaining to workplace safety and health and for providing assistance to employers and workers about workplace safety and health issues. Cal/OSHA regulations are administered through Title 8 of the California Code of Regulations. The regulations require all manufacturers or importers to assess the hazards of substances which they produce or import and all employers to provide information to their employees about the hazardous substances to which they may be exposed.

California Office of Environmental Health Hazard Assessment

Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. The proposition was intended by its authors to protect California citizens and the state's drinking water sources from chemicals known to cause cancer, birth defects, or other reproductive harm and to inform citizens about exposures to such chemicals. Proposition 65 requires the governor to publish, at least annually, a list of chemicals known to the state to cause cancer or reproductive toxicity.

California Department of Forestry and Fire Protection

The Department of Forestry and Fire Protection (Cal Fire) protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. Cal Fire's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn more than 172,000 acres annually (Cal Fire 2015).

The Office of the State Fire Marshal supports Cal Fire's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

2.2 REGULATORY FRAMEWORK

California Public Resources Code

Fire Hazard Severity Zones – Public Resources Code Sections 4201-4204

PRC Sections 4201–4204 and Government Code Sections 51175–89 direct Cal Fire to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as fire hazard severity zones (FHSZ), define the application of various mitigation strategies to reduce risk associated with wildland fires. The project site is not designated as a fire hazard severity zone within the Local Responsibility Area (LRA) for Eastvale (Cal Fire 2015).

California Fire Code

The 2013 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 California (CBSC 2014). 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. The City of Eastvale has adopted the California Fire Code as part of its building regulations (Municipal Code Chapter 110.20).

LOCAL

San Bernardino County Airport Land Use Commission

The San Bernardino County Airport Land Use Commission governs 15 airports in San Bernardino County, including Chino Airport in Chino. In November 1991, the commission adopted the Comprehensive Land Use Plan for Chino Airport, which establishes land use, noise, and safety policies for projects in the vicinity of the airport, including compatibility criteria and maps for the influence areas of individual airports. The Land Use Plan also establishes procedural requirements for compatibility review of development proposals related to the Chino Airport Influence Area. The project site is not within the established airport compatibility zones.

Riverside County Fire Department Strategic Plan

The Riverside County Fire Department's (2009) Strategic Plan 2009–2029 covers fiscal years 2009–10 through 2029–30. The plan describes the array of fire and rescue services provided to citizens, and it provides an evaluation of the current status of various commonly used service performance measures. The plan also makes recommendations for staffing, facilities, and station sites and remodels.

Riverside County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan is to identify the county's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce

or eliminate long-term risk to people and property from natural and man-made hazards. The City of Eastvale participates in the Multi-Jurisdictional Hazard Mitigation Plan.

City of Eastvale Local Hazard Mitigation Plan

State, tribal, and local governments are required to develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for state, local, and tribal governments to undertake a risk-based approach to reducing risks from natural hazards through mitigation planning. The City-adopted Local Hazard Mitigation Plan specifies actions for the coordination of operations, management, and resources during emergencies. The City of Eastvale updated its Local Hazard Mitigation Plan (LHMP) in August 2014. The LHMP is updated on a five-year basis.

City of Eastvale Municipal Code

Chapter 110.20

Chapter 110.20, Fire Code, adopts the 2012 International Fire Code and the 2013 Edition of the California Fire Code.

Section 130.08.020

Section 130.08.020, General Street Design, regulates subdivision street design and requires adequate alternate or secondary access roads for any subdivisions located in high fire hazard areas that are more than 660 feet from a maintained circulatory road.

Section 130.08.040

Section 130.08.040, Street Grades, regulates subdivision street grades in the city to design a street system that is more compatible with the existing terrain. Grades for local streets may not exceed 16 percent, unless approved by both the Transportation and Fire departments. Also, in areas with an elevation of 5,000 feet or more, street grades may not exceed 10 percent, except that grades up to 15 percent may be approved for distances not to exceed 200 feet.

2.2.11 HYDROLOGY AND WATER QUALITY

FEDERAL

Clean Water Act

The federal Clean Water Act gives states the primary responsibility for protecting and restoring water quality. In California, the State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) are the agencies with primary responsibility for implementing federal CWA requirements, including developing and implementing programs to achieve water quality standards. Water quality standards include designated beneficial uses of water bodies, criteria or objectives (numeric or narrative) which are protective of those beneficial uses, and policies to limit the degradation of water bodies. The project site is located in a portion of the state that is regulated by the Santa Ana Regional Water Quality Control

2.2 REGULATORY FRAMEWORK

Board, and the water quality standards for the project site are contained in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) (Santa Ana RWQCB 1995).

Sections 401 and 404 of the Clean Water Act

Sections 401 and 404 of the federal Clean Water Act are administered through the Regulatory Program of the US Army Corps of Engineers (USACE) and regulate the water quality of all discharges of fill or dredged material into waters of the United States, including wetlands and intermittent stream channels. Section 401, Title 33, Section 1341 of the Clean Water Act sets forth water quality certification requirements for any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into the navigable waters.

Section 404, Title 33, Section 1344 of the CWA in part authorizes the USACE to:

- Set requirements and standards pertaining to such discharges: subparagraph (e);
- Issue permits “for the discharge of dredged or fill material into the navigable waters at specified disposal sites:” subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if “the discharge of such materials into such area would have an unacceptable, adverse effect on municipal water supplies and fishery areas:” subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual state or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such state or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain federal or state projects from regulation under this section: subparagraph (r); and
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).

National Pollutant Discharge Elimination System

As authorized by Section 402(p) of the CWA, 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. The State Water Resources Control Board issues NPDES permits to cities and counties through the Regional Water Quality Control Boards. It is the responsibility of the RWQCBs 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. Waste discharge requirements for discharges to surface waters also serve as NPDES permits.

General Construction Activity Storm Water Permits and Stormwater Pollution Prevention Plans

In accordance with NPDES regulations, the SWRCB has issued a Statewide General Permit (Water Quality No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ) for construction activities in the state. The Construction General Permit (General Permit) is implemented and enforced by the RWQCBs. The General Permit applies to any construction activity affecting 1 acre or more and requires those activities to minimize the potential effects of construction runoff on receiving water quality. Performance standards for obtaining and complying with the General Permit are described in NPDES General Permit No. CAS000002, Waste Discharge Requirements, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ.

General Permit applicants are required to submit to the appropriate regional board Permit Registration Documents for the project, which include a Notice of Intent, a risk assessment, a site map, a signed certification statement, an annual fee, and a stormwater pollution prevention plan (SWPPP). The permit program is risk based, wherein a project's risk is based on the project's potential to cause sedimentation and the risk of such sedimentation on the receiving waters. A project's risk determines its water quality control requirements, ranging from Risk Level 1, which consists of only narrative effluent standards, implementation of best management practices (BMPs), and visual monitoring, to Risk Level 3, which consists of numeric effluent limitations, additional sediment control measures, and receiving water monitoring. Additional requirements include compliance with post-construction standards focusing on low impact development (LID), preparation of rain event action plans, increased reporting requirements, and specific certification requirements for certain project personnel.

The SWPPP must include implementing best management practices to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges. Examples of typical construction best management practices included in SWPPPs include, but are not limited to:

- Using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils.
- Storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water.
- Developing and implementing a spill prevention and cleanup plan.
- Installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the drainage system or receiving waters.

Total Maximum Daily Loads

Under CWA Section 303(d) and California's Porter-Cologne Water Quality Control Act of 1969, the State of California is required to establish beneficial uses of state waters and to adopt water quality standards to protect those beneficial uses. Section 303(d) establishes the total maximum daily load (TMDL) process to assist in guiding the application of state water quality standards, requiring the states to identify waters whose water quality is "impaired" (affected by the presence of pollutants or contaminants) and to establish a TMDL, or the maximum quantity of a particular contaminant that a water body can assimilate without experiencing adverse effects on the beneficial use identified. The establishment of TMDLs is generally a stakeholder-driven process that involves investigation of sources and their loading (pollution input), estimation of

2.2 REGULATORY FRAMEWORK

load allocations, and identification of an implementation plan and schedule. Where stakeholder processes are not effective, total maximum daily loads can be established by the RWQCBs or the EPA. Total maximum daily loads are adopted as amendments to the Basin Plan.

STATE

Porter-Cologne Water Quality Control Act

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act to preserve, enhance, and restore the quality of the state's water resources. The CWA and the Porter-Cologne Water Quality Control Act are similar in many ways, with the fundamental purpose of both laws being to protect the beneficial uses of water. An important distinction between the two is that the Porter-Cologne Water Quality Control Act addresses both groundwater and surface water, while the CWA addresses surface water only.

The Porter-Cologne Water Quality Control Act established the SWRCB and the nine RWQCBs as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and nonpoint sources are regulated. The act authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning, including groundwater and surface water management programs and control and use of recycled water.

State Water Resources Control Board

The five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters (SWRCB 2015). The SWRCB is responsible for implementing the Clean Water Act and issues NPDES permits to cities and counties through Regional Water Quality Control Boards.

REGIONAL

Santa Ana Regional Water Quality Control Board

The Santa Ana Regional Water Quality Control Board (RWQCB) has the responsibility for controlling water quality in Los Angeles County, San Bernardino County, Orange County, and parts of Riverside County. The water quality standards for water bodies in the Santa Ana Region are contained in the Water Quality Control Plan for the Santa Ana River Basin (Santa Ana RWQCB 1995).

Water Quality Control Plan for the Santa Ana River Basin (Santa Ana Region Basin Plan)

The Santa Ana Region Basin Plan is the basis for the Regional Board's regulatory programs establishing water quality standards for the groundwater and surface waters of the region to protect beneficial uses of the receiving water bodies in the basin. **Table 2.2-3** lists beneficial uses of the receiving waters located in the Santa Ana River watershed.

**TABLE 2.2-3
BENEFICIAL USES FOR THE CUCAMONGA CREEK (REACH 1) AND SANTA ANA RIVER (REACH 3)**

Water Body	Beneficial Uses								
	MUN	GWR	AGR	REC-1	REC-2	WARM	LWARM	WILD	RARE
Cucamonga Creek (Reach 1 Valley Reach)	+	X		X ³	X		X	X	
Santa Ana River (Reach 3)	+	X	X	X	X	X		X	X

Source: Santa Ana RWQCB 1995

Notes: X Present or Potential Beneficial Use; + Exceeded from MUN (see text)

As listed in **Table 2.2-3**, beneficial uses include the following:

- Municipal and Domestic Supply (MUN) – Uses of water for community, military, or individual water supply systems including but not limited to drinking water supply.
- Groundwater Recharge (GWR) – Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
- Agricultural Supply (AGR) – Includes uses of water for farming, horticulture, or ranching including but not limited to irrigation, stock watering, or support of vegetation for range grazing.
- Water Contact Recreation (REC-1) – Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include but are not limited to swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, or use of natural hot springs.
- Non-Contact Water Recreation (REC-2) – Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include but are not limited to picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- Warm Freshwater Habitat (WARM) – Uses of water that support warm water ecosystems including but not limited to preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems including but not limited to preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- Rare, Threatened or Endangered Species (RARE) – Waters that support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered.

2.2 REGULATORY FRAMEWORK

Waste Discharge Requirements for Riverside County MS4s (Order No. R8-2010-0033)

The Santa Ana RWQCB adopted Order No. R8-2010-0033, NPDES No. CAS 618033, as amended by R8-2013-0024, NPDES No. CAS618033, for discharges into the municipal separate storm sewer systems (MS4s) draining the county. The Santa Ana MS4 Permit is for the portion of the Santa Ana River watershed in Riverside County. The City of Eastvale is a permittee under the Santa Ana MS4 Permit. This permitting program includes inspections of construction sites, commercial facilities, and municipal stormwater inspections, development of BMPs for existing development, comprehensive water quality monitoring, and assessment of stormwater program effectiveness, among other measures to meet specific water quality standards. Additionally, any discharges into MS4s require the preparation of a water quality management plan (WQMP), which identifies specific BMPs to be incorporated into the design and typically includes design measures that will minimize urban runoff, minimize impervious footprint, conserve natural areas, and minimize directly connected impervious areas.

LOCAL

City of Eastvale Municipal Code

The City's Municipal Code establishes the following requirements that pertain to hydrology and water quality:

- Chapter 14.12, Stormwater Drainage System Protection Regulations, establishes requirements for stormwater and non-stormwater quality discharge and control. The chapter prohibits discharges of pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards. The chapter codifies various federal and state requirements for stormwater pollution prevention and requires compliance with these statutes and regulations. The purpose of this chapter is to reduce pollutants in stormwater discharges to the maximum extent practicable, regulate illicit connections and discharges to the storm drain system, and regulate non-stormwater discharges to the storm drain system. The chapter requires new development projects to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water via best management practices that may, among other things, require new developments or redevelopments to increase permeable areas, direct runoff to permeable areas, and maximize stormwater storage for reuse.
- Chapter 110.80, Floodplain Management, prohibits any development within floodways and also establishes requirements for construction in floodplains. This chapter codifies federal requirements for development in floodplains and requires compliance with those regulations.

2.2.12 POPULATION, HOUSING, AND EMPLOYMENT

STATE

Regional Housing Needs Plan

California Government Code Section 65584 requires the California Department of Housing and Community Development, in consultation with local councils of governments, to determine each region's existing and projected housing needs. Each council of governments is then

required to adopt a Regional Housing Needs Plan (RHNP) that allocates a share of the regional housing need to each city and county. The intent of the RHNP is to ensure local jurisdictions address the needs of their immediate areas and have the ability to provide their share of housing needed for the entire region. The Southern California Association of Governments (SCAG) developed the RHNP that sets forth the allocation of the City of Eastvale's fair share of regional housing. SCAG allocates housing production goals to jurisdictions in the region based on their projected share of the region's growth, the state of the local housing market and vacancies, and the jurisdiction's housing replacement needs. Demonstrating the City's ability to accommodate residential development to meet the Regional Housing Needs Allocation (RHNA) is an objective of the General Plan Housing Element.

Regional Housing Needs Plans are also intended to ensure that every community provides an opportunity for a mix of affordable housing to serve all economic segments of its population. Housing elements are required to demonstrate that there are adequate sites and appropriate zoning to address existing and anticipated housing demands during the planning period and that market forces are not inhibited in addressing the housing needs for all facets of a particular community.

The projected housing needs in the RHNA are categorized by income levels (very low, low, moderate, and above moderate income) established by the US Department of Housing and Urban Development (HUD). According to the Eastvale Housing Element (2013a), Eastvale will need to accommodate a total of 1,549 units including 183 extremely low-income, 184 very low-income, 254 low-income, 287 moderate-income, and 641 above moderate-income housing units. As outlined in the City's Housing Element, Eastvale is able to accommodate the RHNA based on vacant land available for residential development in conjunction with a General Plan Amendment.

2.2.13 PUBLIC SERVICES AND SERVICES

2.2.13.1 FIRE PROTECTION

STATE

Uniform Fire Code

The Uniform Fire Code contains regulations relating to the construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code also contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

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

2.2.13.2 PUBLIC SCHOOLS

STATE

Leroy F. Greene School Facilities Act of 1998 (SB 50)

California voters approved Proposition 1A in November of 1998. Proposition 1A authorized \$9.2 billion in state general obligation bonds for the financing of school facilities. Proposition 1A's companion legislation (Chapter 407, Statutes of 1998, Senate Bill [SB] 50) went into effect upon the measure's approval. SB 50 significantly altered the system of fees that can be placed on new development in order to pay for the construction of school facilities. Prior to the passage of Proposition 1A, school districts were limited in the amount of school facility developer fees they could charge. Also, as a result of the Mira, Hart, and Murietta decisions made in the years preceding the passage of Proposition 1A, cities and counties were able to impose additional school facility fees on development as a condition of obtaining land use approval. SB 50 and Proposition 1A provided a comprehensive school facilities financing and reform program by authorizing the \$9.2 billion school facilities bond issue, school construction cost containment provisions, and an eight-year suspension of the Mira, Hart, and Murietta court cases. SB 50 created different levels of developer fees and prohibited local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate. They also reinstated the school facility fee cap for legislative actions, which is adjusted biannually in January. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be full and complete school facilities mitigation. These provisions were in effect until 2006 and will remain in place as long as subsequent state bonds are approved and available.

The three levels of developer fees established by SB 50 are described below.

- 1) Level 1 fees are base statutory fees. As of January 30, 2008, the maximum assessment for fees was \$2.97 per square foot of residential development and \$0.47 per square foot of commercial/industrial development.
- 2) Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The State would match the 50 percent funding if funds are available.
- 3) Level 3 fees apply if the State runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies.

In order to levy the alternate (Level 2) fee and qualify for 50 percent State matching funds, a school district must prepare and adopt a School Facilities Needs Analysis, apply and be eligible for state funding, and satisfy specified criteria. The ability of a city or county to impose fees is limited to the statutory and potential additional charges allowed by the act, as described above.

The Board of Education approved the following developer fee rates for the Corona-Norco Unified School District effective April 5, 2014 (CNUSD 2015):

Classification	Rate per Square Foot
Residential – Construction	\$3.36
Commercial/Industrial	\$0.54
Senior Housing	\$0.54

2.2.13.3 PARKS AND RECREATION

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., 5 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 greenbelt 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 parkland and the type of development project upon which the fee is imposed (Westrup 2002).

2.2.13.4 POTABLE WATER SERVICE AND INFRASTRUCTURE

STATE

Urban Water Management Planning Act and the JCSD 2010 UWMP

The California Urban Water Management Planning Act requires preparation of an Urban Water Management Plan (UWMP) that accomplishes water supply planning over a 20-year period in 5-year increments; identifies and quantifies adequate water supplies, including recycled water, for existing and future demands in normal, single dry, and multiple dry years; and implements conservation and efficient use of urban water supplies. The most recent UWMP for the Jurupa Community Services District is the 2010 Urban Water Management Plan (JCSD 2011). The 2010

2.2 REGULATORY FRAMEWORK

UWMP identifies how the JCSD plans to deliver a reliable and high quality water supply for its customers, even during dry periods, over a 25-year period via continued groundwater extraction, water exchanges, recycling, desalination, and water banking/conjunctive use. Specific planning efforts are discussed in regard to each option, involving detailed evaluations of how each option would fit into the overall supply/demand framework, how each option would impact the environment, and how each option would affect customers.

Executive Order B-29-15

California is currently (2015) experiencing severe drought conditions. As a result, Governor Brown directed the State Water Board to implement mandatory water reductions in urban areas to reduce potable urban water usage by 25 percent statewide. On April 1, 2015, the Governor issued the fourth in a series of Executive Orders on actions necessary to address California's severe drought conditions. Executive Order B-29-15 directed the State Water Board to implement mandatory water reductions in urban areas to reduce potable urban water usage by 25 percent statewide. Under Executive Order B-29-15, new construction is prohibited from installing irrigation with potable water that is not delivered by drip or microspray systems.

On May 5, 2015, the State Water Resources Control Board adopted an emergency conservation regulation in accordance with the Governor's directive. The provisions of the emergency regulation went into effect on May 15, 2015 (SWRCB 2015). In addition, each water supplier, including the Jurupa Community Services District, was mandated to meet a specific water conservation standard based on residential gallons per capita per day. Information on the JCSD's water conservation standard and compliance regulations that would be applicable to the proposed project is included below.

REGIONAL

1978 Chino Basin Judgment and the Chino Basin Watermaster

The Chino Groundwater Basin supplies the Eastvale and thus the proposed Master Plan area with potable water. In the 1970s, water users became concerned with increasing water production, a decreasing water supply, and declining water quality in the Chino Basin. By 1975, several major Chino Basin water users and the State of California initiated studies of problems allocating water rights within the Chino Basin and began to negotiate a solution. During negotiations, three pools of Chino Basin water users with similar interests in the allocation of the Chino Basin emerged: agricultural users, including dairy farmers and the State of California (the Agricultural Pool); industrial users (the Non-Agricultural Pool); and water municipalities (the Appropriative Pool) and other government entities sometimes collectively referred to herein as the Pools and each individually as a Pool). On January 2, 1975, several Chino Basin producers filed suit in the California State Superior Court for San Bernardino County to settle the problem of allocating water rights in the Chino Basin. On January 27, 1978, the court entered a judgment in *Chino Basin Municipal Water District v. City of Chino et al.* adjudicating water rights in the Chino Basin and establishing the Watermaster (the judgment) (CBWM 2015).

The judgment represents a plenary adjudication of all water rights in the Chino Basin and is administered under the authority an overseeing agency known as the Chino Basin Watermaster with continuing jurisdiction by the court. Pumping, recharging, and preventing overdraft in the Chino Basin is managed and reported by the Watermaster.

Optimum Basin Management Program

Groundwater management activities in the Chino Basin are implemented through an Optimum Basin Management Program (OBMP) that was developed in 2000, pursuant to the judgment. The OBMP consists of nine key elements covering a wide range of water activity in the basin, including a groundwater monitoring program, comprehensive recharge program, water supply plan for impaired areas, regional supplemental water program, groundwater management plan for the southwestern portion of the basin, cooperative program to improve basin management and program, salt management program, groundwater storage management plan, and storage and recovery program.

The recharge element is one of the main components of the OBMP. The development and implementation of the recharge plan is to increase recharge basin capacity and accumulate greater quantities of water made accessible to producer and consumers (CBWM 2015).

Peace I and Peace II Agreements

Following years of negotiation, basin stakeholders and the court approved the Peace (I) Agreement in 2000, formalizing and making permanent the Watermaster governance structure. In 2007, signing of the Peace II Agreement provided cost savings and other benefits through the Basin Reoperation program. Essentially, Basin Reoperation is the controlled overdraft of the Basin by 400,000 acre-feet via forgiveness of the Desalter replenishment obligation, resulting in a regional lowering of groundwater levels across the Chino Basin, which makes it possible for the Desalter pumping to achieve and maintain Hydraulic Control (see Section 2.1 Existing Setting). The many benefits of Basin Reoperation and Hydraulic Control include improved basin yield by reduced groundwater outflow to (and increased groundwater inflow from) the Santa Ana River, a local and reliable supply of potable water from the Chino Desalters, improved salinity management via salt export from the Chino Desalters, and the “maximum benefit” groundwater quality objectives which allow for recycled water reuse, among others (CBWM 2015).

Recharge Master Plan

The requirements for a Recharge Master Plan were included in the Peace II Agreement and the December 2007 court order that approved and directed Watermaster to implement the Peace II Agreement. The Groundwater Recharge Master Plan and subsequent updates address how the basin will be contemporaneously managed to secure and maintain hydraulic control, including recharge estimations and summaries of the projected water supply availability as well as the physical means to accomplish the recharge projections. This includes a detailed technical comparison of current and projected groundwater recharge capabilities and current and projected demands for groundwater. The Recharge Master Plan provides guidance as to what should be done if recharge capacity cannot meet or is projected not to be able to meet replenishment needs, detailing how the Watermaster will provide sufficient recharge capacity or undertake alternative measures so that basin operation in accordance with the judgment and the physical solution can be resumed at any time. The most current Recharge Master Plan document is the 2013 Amendment to the 2010 Recharge Master Plan Update (WEI 2013).

JCSD Emergency Drought Regulations (Compliance with Executive Order B-29-15)

As part of the SWRCB’s updated emergency water conservation regulations implemented pursuant to Executive Order B-29-15, the Jurupa Community Services District and its customers are mandated to meet a total 28 percent district-wide reduction in potable water usage. At a 28 percent water usage reduction, the JCSD’s cutback is expected to be approximately 5,625

2.2 REGULATORY FRAMEWORK

acre-feet (equivalent to 1,832,914,288 gallons). In an effort to meet this mandatory water use reduction, on May 26, 2015, the JCSD's Board of Directors adopted Ordinance 389, which replaces the mandatory water conservation program. Ordinance 389 prohibits a variety of wasteful and inefficient water use practices during drought conditions, including allowing water to flow from a person's property due to excessive irrigation, failing to repair leaks, irrigating during the day, etc.

Ordinance 389 also implements policies that require the development of new or offset water sources for new development before a will-serve letter can be issued. At the time of writing of this EIR, the details of how the offset program would work are not available; however, it is anticipated that existing potable water usage for irrigation of landscaping would be replaced by water from non-potable sources. Regardless, the JCSD regulations regarding drought are considered interim but will remain in place until drought conditions ease. It is unknown whether these emergency conditions would be in effect when future development is proposed in the Leal Master Plan area.

2.2.13.5 SOLID WASTE

STATE

California Integrated Waste Management Act/AB 939

Solid waste regulation in California is governed by the California Integrated Waste Management Act of 1989, which is commonly known as AB 939. The act, codified into the California Public Resources Code, emphasizes a reduction of waste disposed in California landfills. To achieve a reduction of waste in landfills in the state, AB 939 requires all city and county plans to include a waste diversion schedule with the goals to divert 25 percent of solid waste from landfills by 1995 and divert 50 percent of solid waste from landfills by the year 2000. To achieve these goals, AB 939 emphasizes that cities and counties reduce the production of, recycle, and reuse solid waste.

REGIONAL

Countywide Integrated Waste Management Plan

The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). AB 939 redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. AB 939 required each of the cities and unincorporated portions of counties throughout the state to divert a minimum of 25% by 1995 and 50% of the solid waste landfilled by the year 2000. To attain these goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices, including requiring local governments to prepare and implement plans to improve the management of waste resources (RCDWR 2015).

The CIWMP's components include the Countywide Summary Plan, the Countywide Siting Element, the Source Reduction and Recycling Element (SRRE), the Household Hazardous Waste Element, and the Non-Disposal Facility Element. The Summary Plan summarizes the steps needed to cooperatively implement programs among the county's jurisdictions to meet and maintain the 50 percent diversion mandates. The Siting Element demonstrates that there are at least 15 years of remaining disposal capacity to serve all the jurisdictions in the county. If there is not adequate capacity, a discussion of alternative disposal sites and additional diversion programs

must be included in the Siting Element. The Source Reduction and Recycling Element was developed separately by each Riverside County jurisdiction, including the Unincorporated County, and their purpose was to analyze the local waste stream to determine where to focus diversion efforts, including programs and funding. The Household Hazardous Waste Element was developed by jurisdictions and provides a framework for recycling, treatment and disposal practices for Household Hazardous Waste programs. The Non-Disposal Facility Element identifies and describes existing and proposed facilities, other than landfills and transformation facilities, requiring a solid waste permit to operate. Non-disposal facilities are also those facilities that will be used by a jurisdiction to meet its diversion goals. The Riverside County Non-Disposal Facility Element identifies and describes those non-disposal facilities that will be needed to implement the Riverside County SRRE.

2.2.13.6 ELECTRICITY AND NATURAL GAS

STATE

California Energy Commission, Title 24

The California Energy Commission has adopted and periodically updates standards (codified in Title 24, Part 6 of the California Code of Regulations) to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. Effective July 1, 2014, the 2013 Building Energy Efficiency Standards for Residential and Nonresidential Buildings establish a minimum level of building energy efficiency. The standards are updated roughly every three years, with the next cycle anticipated in 2016.

The standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations. Each update of the standards reflects advances in technology for building materials, windows, envelope insulation, and HVAC systems. The 2013 standards also included updates to the energy efficiency divisions of the California Green Building Code Standards (Title 24, Part 11). A set of prerequisites was established for both the residential and nonresidential Reach Standards, which include efficiency measures that should be installed in any building project striving to meet advanced levels of energy efficiency. The residential Reach Standards have also been updated to require additional energy efficiency or on-site renewable electricity generation to meet a specific threshold of expected electricity use. Both the residential and nonresidential Reach Standards include requirements for additions and alterations to existing buildings. The standards are applied as part of the building permit review process.

2.2 REGULATORY FRAMEWORK

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3.0 ENVIRONMENTAL ANALYSIS

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

3.1 CONCEPTUAL BASIS FOR THE ENVIRONMENTAL ANALYSIS

As discussed in Section 2.0, Project Description, the specific mix of land uses that will be developed on the project site will not be fully defined until implementation of Stages 2 and 3 of the Staged Development Process in order to provide an opportunity for development of the site based on optimal market conditions. The Master Plan currently identifies only the types of land uses that may occur within the project site along with the maximum and/or minimum amounts of development (**Table 2.0-2** in Section 2.0). Therefore, the environmental analysis is based on the following concepts:

1. The impacts of physical changes to the site such as grading and excavation can be evaluated now because the precise land use pattern on the project site is largely inconsequential to the environmental analysis.
2. Impacts that occur off-site, such as transportation and air quality, can be estimated using a "maximum-case" development assumption based on buildout of land uses on the higher end of the allowed ranges. These assumptions are provided in **Table 2.0-3** in Section 2.0, Project Description. While maximum development of the entire range of land use is theoretically possible, past and current market trends, along with site constraints, make it highly unlikely that the maximum case buildout would occur on the project site.
3. The submittal of Stage 2 development plans and Stage 3 specific projects will be subject to review within the context of this EIR and mitigation plan ensuring that any use-specific impacts are addressed.

3.2 APPROACH TO ENVIRONMENTAL ANALYSIS

The EIR includes 13 technical sections, each of which analyzes the project's potential impacts associated with an environmental issue area. Each section is organized as follows:

Overview – Includes a simple summary of the results of the environmental analysis, including whether impacts were significant and whether mitigation measures are required to reduce impacts.

Mitigation Measures – Lists mitigation measures included in the Leal Master Plan Mitigation Program. The Mitigation Program is discussed in more detail below.

Thresholds of Significance – Includes the thresholds used for determining the level of significance of the environmental impacts, as well as a summary of the ultimate determination for each threshold. These thresholds, along with the below impacts analysis, are applied to the existing conditions described in Subsection 2.1, Existing Setting.

Methodology – Discusses the approach to environmental analysis.

Project Impact Analysis/Cumulative Impact Analysis (Threshold Discussions) – Detailed discussion of each threshold of significance and whether the project would have a significant impact. When addressing potential environmental impacts the first evaluation is whether compliance with an existing federal, state or local law or permit, or a proposed policy in the Leal Master Plan would fully address the impact. Applicable regulations are discussed in detail in Subsection 2.2, Regulatory Framework and cross referenced in the analysis. Mitigation measures that will apply to future development within the Master Plan are identified to reduce or eliminate remaining impacts (see Mitigation Program discussion below). Each threshold discussion

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

concludes with determination as to the level of significance (No Impact, Less than Significant, or Significant and Unavoidable).

3.3 MITIGATION PROGRAM

As the project identifies only the general parameters for future development while allowing for flexibility in the design and implementation of that development, the proposed project does not include or grant final entitlements for development on the project site. Therefore, mitigation for potential impacts needs to be tied to the Staged Development Process included in the Leal Master Plan. More specifically, the mitigation measures required to mitigate impacts associated with future development in the Master Plan area would apply to Stage 2 and 3 submittals. Therefore, the approach to mitigation included herein consists of an inventory of mitigation measures that will apply to every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area (Leal Master Plan Mitigation Program).

All mitigation measures listed in the technical sections of this Draft EIR are included in the Leal Master Plan Mitigation Program and as such, will be required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the mitigation only if the project applicant were to submit site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been “discharged” or “completed” with physical changes completed by a prior project/plan).

3.1.1 OVERVIEW

This section concludes that the proposed project is consistent with the existing City of Eastvale General Plan and requires no mitigation measures to conclude that there is either no land use impact or that land use impacts are less than cumulatively considerable.

3.1.2 MITIGATION MEASURES

None required.

3.1.3 THRESHOLDS OF SIGNIFICANCE

Impacts to land use are considered significant if implementation of the project would:

Threshold	Determination
1) Physically divide an established community.	No Impact
2) 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 and zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	No Impact
3) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a 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.)	Less Than Cumulatively Considerable

3.1.4 METHODOLOGY

Evaluation of the proposed Master Plan’s potential land use impacts was based on the potential for the proposed Master Plan to conflict with the policies and guidelines contained in the City of Eastvale General Plan, Design Guidelines, and/or Zoning Code.

3.1.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.1.1 The project would be considered to have a significant impact if it would physically divide an established community. **No impact** will occur. (Threshold 1)

The proposed project includes new roadways and pedestrian paths as both policy and illustrative graphics as part of the design requirements for future development. The proposed Master Plan (Chapter 4.3.7) includes the following statement about connectivity:

This Master Plan does not establish an internal circulation system at this time and will be provided in Stage 2 with the first phase of development as outlined in Chapter 5, Development Process. The internal circulation system shall be designed to be consistent with Chapters 4 and 5 of the Eastvale Design Standards and Guidelines for residential and nonresidential site and street design.

3.1 LAND USE

The Eastvale Design Standards and Guidelines include the following regarding connectivity:

- RDS-1: All residential development shall be designed to reinforce Eastvale's image as a contemporary community with vibrant, livable neighborhoods and walkable pedestrian- and bicycle-oriented development. (GP Policy DE-1)

- NRDS-6: All commercial developments shall be designed to maximize integration with and safe pedestrian connectivity to nearby residential neighborhoods, parks, transit access areas, and other community features where feasible and desirable.

Adherence to the design standards will ensure connectivity to the existing roads adjacent to the project site. None of the existing roads will be blocked or impeded by development. As proposed, future development on the project site will include extending vehicular and pedestrian access through the site to connect to the existing roadway network. Because there is currently no such connection, the proposed project will improve connectivity in this part of the city and will not divide an established community. Therefore, there is **no impact**.

Threshold Discussion 3.1.2 The project would be considered to have a significant impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. **No impact** would occur. (Threshold 2)

Development that results from the proposed project will be required to comply with the existing General Plan and Zoning Code, as well as with the applicable provisions of the adopted Western Riverside County Multiple Species Habitat Conservation Plan, the Stephens' Kangaroo Rat Habitat Conservation Plan, and the Delhi Sands Habitat Conservation Plan. Compliance methods for these plans are included in Section 3.7, Biological Resources, of this EIR.

All development in the city is required to participate in the regional Transportation Uniform Mitigation Fee, the City's Development Impact Fee, and the School Impact Fee administered by the school districts serving Eastvale. These fees are used to offset the direct and indirect impacts of growth on the affected systems. The method of compliance with these fee programs, and the resulting environmental determination, is discussed in Section 3.2, Transportation and Traffic, and Section 3.13, Public Services and Utilities, of this EIR.

Other programs designed to avoid or mitigate an environmental effect include the City's National Pollutant Discharge Elimination (NPDES) permit and the South Coast Air Quality Management District (SCAQMD), which govern the quality of stormwater runoff and air quality, respectively. The method of compliance with these programs, and the resulting environmental determination, is discussed in the hydrology and air quality sections of this EIR.

Because all development within the Leal Master Plan area must be consistent with the City's General Plan and Zoning Code and must also be consistent with regional plans adopted for environmental impacts as noted above and in the relevant sections of this EIR, there is **no impact**.

3.1.5 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.1.3 The project would be considered to have a cumulatively considerable land use impact if it would result in future land use changes or intensification of development of other sites or be inconsistent with the Eastvale General Plan that expresses the long-term vision for the city and for this site specifically. Impacts would be **less than cumulatively considerable**. (Threshold 3)

The proposed project site is surrounded by urban development and represents one of the last remaining undeveloped areas of the city. The property is identified in General Plan Policy LU-19 that calls for a mix of office, civic, hotel, multi-family residential, and recreation and entertainment land uses. The Leal Master Plan was prepared to implement this policy.

The project will contribute traffic to Limonite Avenue, which is identified in Section 3.2, Transportation and Traffic, of this EIR as being at or near capacity due to existing and proposed growth in the region. The impacts of regional projects on the transportation system are addressed in Section 3.2, Transportation and Traffic.

Because the land surrounding the property is already developed with residential and commercial uses, it is unlikely that the proposed project will result in future land use changes or intensification of development of other sites. Impacts to land use are anticipated to be confined to the project site. The proposed project is consistent with the Eastvale General Plan that expresses the long-term vision for the city and for this site specifically and the project would not change the type or intensity of land uses in the project area or cumulative setting. This impact is considered **less than cumulatively considerable**.

3.1 LAND USE

REFERENCES

Eastvale, City of. 2012. *City of Eastvale General Plan*.

———. 2015. *Leal Master Plan, Public Review Draft*.

3.2.1 OVERVIEW

This section is based on the analysis and findings in the transportation impact assessment (TIA) for the Leal Master Plan prepared by Fehr & Peers (**Appendix 3.2**). This section concludes that mitigation measures included in the Leal Master Plan Mitigation Plan will ensure future development adequately mitigates adverse impacts associated with conflicts with the Riverside County Congestion Management Program (CMP), hazards resulting from design features, inadequate emergency access, and conflicts with adopted policies, plans, and programs regarding alternative transportation to a less than significant level. Traffic volumes resulting from the proposed project will result in significant and unavoidable impacts to three roadway segments and cumulatively considerable and significant and unavoidable impacts to four roadway segments.

3.2.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been “discharged” or “completed” with physical changes completed by a prior project/plan).

MM 3.2.1a Fair share of funding shall be paid for widening Limonite Avenue along the project frontage from two to three lanes in each direction. Funding shall be determined and paid via the Riverside County Transportation Uniform Mitigation Fee (TUMF). Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS D operations and consistent with the Master Plan’s infrastructure phasing provisions.

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.2.1b A focused traffic study shall be prepared that demonstrates the project’s consistency with the transportation impact assessment (TIA) for the Leal Master Plan prepared by Fehr & Peers (2015). The traffic study shall assess the following:

- Parking;
- Site access and on-site circulation;
- Interaction of driveways with adjacent intersections (if appropriate);
- Impacts on local intersections;
- Impacts to pedestrian, transit, and bicycle facilities; and
- Trip generation monitoring study to ensure that, as land develops in the Leal Master Plan area, the total development generates traffic at or below the levels assumed in this Draft EIR.

3.2 TRANSPORTATION AND TRAFFIC

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.2.1c

Hamner Avenue shall be widened between Limonite Avenue and Bellegrave Avenue to three lanes in each direction either directly or through fair-share funding as determined by infrastructure and/or facility financing plans approved for the Leal Master Plan. Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS F operations and consistent with infrastructure phasing provisions established as part of Master Plan implementation.

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

3.2.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
<p>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.</p> <p>In the City of Eastvale, the City's General Plan identifies a performance standard of level of service (LOS) C on local roadways. For California Department of Transportation (Caltrans) Caltrans facilities, LOS C was identified as the minimum acceptable operating level per Caltrans guidelines, which state that the threshold between LOS C and LOS D should apply.</p> <p>LOS C is considered the minimum acceptable operating level for Caltrans-controlled facilities (State Route 60 roadway segments, Interstate 15 roadway segments).</p>	<p><u>Less Than Significant with Mitigation</u></p> <p>Limonite Avenue: Harrison Avenue to Scholar Way</p> <p>Hamner Avenue: Limonite Avenue to Bellegrave Avenue</p> <p><u>Significant and Unavoidable</u></p> <p>Limonite Avenue: Scholar Way to Hamner Avenue</p> <p>Limonite Avenue: Hamner Avenue to I-15 Ramps</p> <p>Limonite Avenue: I-15 Ramps to Wineville Avenue</p>
<p>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.</p> <p>The Riverside County CMP has established a minimum threshold of LOS E for CMP streets and highways, which include SR 60, I-15, and Limonite Avenue. When the level of service on a segment or at an intersection fails to attain this established level of service standard, a deficiency plan must be prepared by the local jurisdiction where the deficiency is identified.</p>	<p>Less Than Significant</p>
<p>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.</p>	<p>No Impact</p>
<p>4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).</p>	<p>Less Than Significant with Mitigation</p>
<p>5) Result in inadequate emergency access.</p>	<p>Less Than Significant with Mitigation</p>

Threshold	Determination
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.	Less Than Significant with Mitigation
7) Contribute to cumulative traffic volumes in the region, resulting in significant impacts to level of service and degradation of traffic operations.	<p><u>Less Than Cumulatively Considerable</u> Cantu-Galleano Ranch Road: I-15 Ramps to Hamner Avenue</p> <p><u>Significant and Unavoidable</u> Limonite Avenue: Scholar Way to Hamner Avenue Limonite Avenue: Hamner Avenue to I-15 Limonite Avenue: Archibald Avenue to Harrison Avenue Limonite Avenue: Harrison Avenue to Scholar Way Limonite Avenue: I-15 Ramps to Wineville Avenue Hamner Avenue: Limonite Avenue to Bellegrave Avenue I-15: South of Limonite I-15: North of SR 60</p>

3.2.4 METHODOLOGY

The methodology used to analyze roadway segments and transportation impacts is described in detail in the TIA prepared by Fehr & Peers (**Appendix 3.2**).

Roadway segments were analyzed by comparing the average daily traffic (ADT) volume expected from the project to daily volume thresholds as identified by the Transportation Research Board’s *Highway Capacity Manual* (2000) and the City of Eastvale General Plan. The 9th Edition of the *Institute of Transportation Engineers* (ITE) Trip Generation rates were used to determine daily trips generated by the project, with internalization rates determined based on the Mixed Use Development trip generation methodology (MXD).

Because the Leal Master Plan allows for a range of development potential, a “worst-case” assumption was made for the land uses. The assumptions are summarized below.

- 1) 660 multi-family homes (apartments)
- 2) 1,525,000 square feet of general retail (shopping center)
- 3) 460,000 square feet of general office
- 4) 460,000 square feet of medical office
- 5) 450 hotel rooms
- 6) 100,000-square-foot civic center

3.2 TRANSPORTATION AND TRAFFIC

Applying the ITE trip generation and MXD trip internalization estimates, the TIA estimated the following trip generation for the proposed project:

- 69,900 gross daily trips
- 10 percent trip internalization (e.g., trips that stay within the Master Plan area based on the land use information provided above, plus the project's proximity to transit, assumed intersection density, and other factors that affect trip internalization)
- 63,000 net daily trips after accounting for trip internalization

The project trips were distributed to the surrounding roadway system using existing travel patterns and the locations of complementary land uses in the area. The trip distribution information is detailed in the TIA.

The Riverside Traffic Analysis Model (RIVTAM), with some modifications to update the socioeconomic data to incorporate approved and pending projects in the project area, was used for developing cumulative traffic forecasts. This model incorporates land use information and roadway network characteristics (roadway alignments, roadway capacities, speeds) to forecast existing and future volumes on area roadways in Riverside County. The model also accounts for projected growth and land use changes in the county, allowing a more accurate forecast of future conditions.

3.2.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.2.1 The project would be considered to have a significant impact if it would result in traffic volumes on area roadways that would exceed performance standards identified in the City's General Plan. This impact is **potentially significant**. (Threshold 1)

Table 3.2-1 summarizes traffic volume, volume-to-capacity ratio, and level of service on project area roadway segments under current (existing) conditions and after implementation of the proposed project. As shown, the addition of project traffic is expected to degrade traffic operations at five roadway segments:

- From level of service (LOS) C to LOS D at Limonite Avenue between Harrison Avenue and Scholar Way
- From LOS C to LOS F at Limonite Avenue between Scholar Way and Hamner Avenue
- From LOS C to LOS F at Limonite Avenue between Hamner Avenue and the Interstate 15 (I-15) southbound ramp
- From LOS D to LOS F at Limonite Avenue between the northbound I-15 ramp and Wineville Avenue
- From LOS C to LOS F at Hamner Avenue between Limonite Avenue and Bellegrave Avenue

The resulting level of service at these roadway segments would conflict with the performance standard of LOS C on local roadways as identified in the City's General Plan and in the proposed Leal Master Plan. This impact is **potentially significant**.

**TABLE 3.2-1
ROADWAY LEVEL OF SERVICE – TRANSPORTATION IMPACT ASSESSMENT**

Roadway Segment	Existing Lanes	Existing Conditions			Existing Plus Project Conditions		
		Volume	V/C	LOS	Volume	V/C	LOS
1. Limonite Avenue: Archibald Avenue to Harrison Avenue	4	17,425	0.49	C	23,725	0.66	C
2. Limonite Avenue: Harrison Avenue to Scholar Way	4	24,674	0.69	C	30,974	0.86	D
3. Limonite Avenue: Scholar Way to Hamner Avenue	4	27,836	0.78	C	59,336	1.65	F
4. Limonite Avenue: Hamner Avenue to I-15 Ramps	6	41,744	0.77	C	70,094	1.30	F
5. Limonite Avenue: I-15 Ramps to Wineville Avenue	4	31,893	0.89	D	38,193	1.06	F
6. Hamner Avenue: Citrus Street to Schleisman Road	4	19,424	0.54	C	25,724	0.72	C
7. Hamner Avenue: Schleisman Road to 68th Street	6	11,145	0.21	C	17,445	0.32	C
8. Hamner Avenue: 68th Street to Limonite Avenue	6	19,016	0.35	C	22,166	0.41	C
9. Hamner Avenue: Limonite Avenue to Bellegrave Avenue	4	14,742	0.41	C	43,092	1.20	F
10. Scholar Way: Limonite Avenue to 68th Street	2	4,627	0.36	C	7,777	0.60	C
11. I-15: South of Limonite Avenue	6	75,950	0.65	C	88,550	0.75	C
12. I-15: Limonite Avenue to Cantu-Galleano Ranch Road	6	78,515	0.67	C	87,965	0.75	C
13. I-15: North of SR 60	8	108,967	0.68	C	118,417	0.74	C
14. Cleveland Avenue: Bellegrave Avenue to Limonite Avenue	4	2,110	0.16	C	5,260	0.40	C
15. SR 60: West of I-15	10	65,073	0.32	C	74,523	0.37	C
16. SR 60: East of I-15	8	76,718	0.48	C	86,168	0.54	C
17. Cantu-Galleano Ranch Rd: I-15 Ramps to Hamner Avenue	4	12,335	0.34	C	18,635	0.52	C

Source: Fehr & Peers 2015

Shading indicates unacceptable operations.

The policies and mitigation measures described below address the potentially significant impacts of the project at each of the identified study locations.

Limonite Avenue: Harrison Avenue to Scholar Way

The TIA determined that, in order to mitigate this impact, Limonite Avenue would need to be widened to six lanes. The widening of Limonite Avenue is a TUMF-designated improvement, and

3.2 TRANSPORTATION AND TRAFFIC

the Leal Master Plan Mitigation Program requires future development to pay its fair share of funding for widening Limonite Avenue through the TUMF program (mitigation measure **MM 3.2.1a**). Chapter 6, Implementation Plan, of the Leal Master Plan requires that full public improvements to Limonite Avenue be constructed with the first phase of development.

In addition, mitigation measure **MM 3.2.1b** as included in the Mitigation Program requires that future development projects prepare focused traffic studies which would address site- and project-specific traffic impacts, including an assessment of intersections and a trip generation monitoring study to ensure that the total development in the project area generates traffic at or below the levels assumed in this Draft EIR.

The planned widening of Limonite Avenue via the TUMF program (mitigation measure **MM 3.2.1a**), and future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would ensure that the traffic resulting from the project would not exceed performance standards on this roadway segment. City of Eastvale General Plan Policy C-3 states that cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees. Therefore, this impact would be reduced to **less than significant**.

Limonite Avenue: Scholar Way to Hamner Avenue

The TIA determined that, in order to mitigate this impact, Limonite Avenue would need to be widened to eight lanes. As discussed above, future development plans/projects would be responsible for a fair-share payment toward the TUMF program, which is responsible for widening Limonite Avenue to six lanes. However, widening beyond six lanes is inconsistent with the City's Circulation Plan and roadway classifications as shown in Table C-1 and Figure C-1 of Chapter 4, Circulation and Infrastructure, of the City's General Plan. Therefore, widening the roadway to eight lanes to improve the level of service is not feasible. The level of service would remain at LOS F after implementation of the Leal Master Plan.

The planned widening of Limonite Avenue via the TUMF program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would mitigate this congestion to the greatest extent feasible. Furthermore, City of Eastvale General Plan Policy C-3 states that cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees. However, the projected LOS F would still conflict with the City's performance standard for this roadway segment and this impact would remain **significant and unavoidable**.

Limonite Avenue: Hamner Avenue to I-15 Ramps

The TIA determined that, in order to mitigate this impact, Limonite Avenue would need to be widened beyond eight lanes, which would be inconsistent with the City's General Plan as discussed above. Therefore, widening the roadway beyond eight lanes to improve the level of service is not feasible, and the level of service would remain at LOS F after implementation of the project.

The planned widening of Limonite Avenue via the TUMF program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1**, would mitigate this congestion to the greatest extent feasible. Furthermore, City of Eastvale General Plan Policy C-3 states that cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees. However, the projected LOS F would still conflict with the City's performance standard for this roadway segment and this impact would remain **significant and unavoidable**.

Limonite Avenue: I-15 Ramps to Wineville Avenue

The TIA determined that, in order to mitigate this impact, this segment of Limonite Avenue would need to be widened to six lanes. Although the widening of Limonite Avenue is a TUMF-designated improvement, this roadway segment is not included and is identified in the 2015 Northwest TUMF Zone Transportation Improvement Program (WRCOG 2015) as having an ultimate width of four lanes. This roadway segment is outside of Eastvale. As such, neither the City nor any developer can guarantee implementation of any mitigation measure to widen the roadway segment. As such, this impact is considered **significant and unavoidable**.

Hamner Avenue: Limonite Avenue to Bellegrave Avenue

The TIA determined that, in order to mitigate this impact, Hamner Avenue would need to be widened to six lanes. Mitigation measure **MM 3.2.1c** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be responsible for this improvement prior to traffic operations deteriorating to LOS F conditions and consistent with the Master Plan's infrastructure phasing provisions.

In addition, mitigation measure **MM 3.2.1b** as included in the Mitigation Program requires future development projects to prepare a focused traffic studies which would address site- and project-specific traffic impacts, including an assessment of intersections and a trip generation monitoring study to ensure that the total development generates traffic at or below the levels assumed in this Draft EIR.

Implementation of mitigation measures **MM 3.2.1b** and **MM 3.2.1c** would ensure that Hamner Avenue would have sufficient capacity to accommodate the projected traffic volume and meet performance standards with the first phase of development, thus reducing this impact to **less than significant**.

Impact 3.2.2 The project would be considered to have a significant impact if it would conflict with any level of service standards, travel demand measures, or other standards established by the Riverside County CMP. This impact is **less than significant**. (Threshold 2)

Although the Riverside County Congestion Management Program has established a minimum threshold of LOS E for Limonite Avenue, deficient segments are identified through a biennial traffic monitoring process. Neither the CMP nor the Riverside County Transportation Commission (RCTC) requires traffic impact assessments for individual development proposals. To ensure that the CMP is appropriately monitored to reduce the occurrence of level of service deficiencies, it is the responsibility of local agencies, when reviewing and approving development proposals, to consider the traffic impacts on the CMP system.

According to the RCTC, local agencies are required to maintain minimum level of service thresholds included in their respective general plans and require traffic impact assessments on development proposals when necessary. Mitigation measure **MM 3.2.1b** as included in the Leal Master Plan Mitigation Program requires future development projects to prepare focused traffic studies which would address site- and project-specific traffic impacts, including those on the CMP system. Therefore, the project would not conflict with any standards established by the Riverside County CMP. This impact is considered to be **less than significant**.

3.2 TRANSPORTATION AND TRAFFIC

Threshold Discussion 3.2.3 The project would be considered to have a significant impact if it would result in a change in air traffic patterns. **No impact** would occur. (Threshold 3)

The project site is surrounded by existing commercial, retail, and residential, developments but is not located within the Airport Influence Area Boundary for Chino Airport. Implementation of the project would not impact air traffic patterns, levels of air traffic use, a change in existing access to air traffic, or a change in location that would result in substantial safety risks. Therefore, **no impact** would occur.

Threshold Discussion 3.2.4 The project would be considered to have a significant impact if it would result in greater potential for hazards resulting from design features or siting of land uses. This is considered a **less than significant** impact due to policy provisions in the proposed Master Plan. (Threshold 4)

Given that the proposed Master Plan does not include an overall land use plan, circulation plan, or infrastructure plan, it is unknown whether future development of the site would increase hazards related to specific design features or the siting of land uses. Therefore, this impact is considered potentially significant.

However, the proposed Leal Master Plan establishes specific parameters for the design and quality of the project area, which must be met by any future development. Phasing requirements have also been established to ensure that comprehensive project-wide plans are developed prior to any development taking place. This includes the requirement that a project-wide land use plan, circulation plan, and design guidelines be submitted with the first phase of proposed development (Leal Master Plan Section 5.2.2.1). The Master Plan (Section 5.2.2.1) requires that the project-wide design guidelines include site design and circulation guidelines addressing strategies to promote safety and visibility. In addition, these project-wide development plan components would be designed and reviewed for consistency with Chapters 4 and 5 of the Eastvale Design Standards and Guidelines for residential and nonresidential site and street design, as well as for consistency with the Master Plan itself.

In addition, mitigation measure **MM 3.2.1b**, as included in the Leal Master Plan Mitigation Program, requires future development projects to prepare focused traffic studies which would address site- and project-specific traffic impacts, including an assessment of site access and on-site circulation and the interaction of driveways with adjacent intersections.

Because all future development in the project area, including site design and access points, would be required to be consistent with design standards set forth by the City and the Leal Master Plan and would be required to prepare a focused traffic study that would address site design hazards, this impact would be reduced to **less than significant**.

Threshold Discussion 3.2.5 The project would be considered to have a significant impact if it would result in inadequate emergency access. This impact is considered **less than significant**. (Threshold 5)

The proposed Master Plan identifies major entry points (Leal Master Plan Figure 5.2, Project Entry Points) and includes connectivity to external roadways that would provide access to emergency personnel. However, because the project does not include an overall land use plan, circulation plan, or infrastructure plan, internal roadways could not be reviewed to assess emergency accessibility. Therefore, this impact is considered potentially significant.

As discussed under Impact 3.2.4 above, the project includes the requirement that a project-wide land use plan, circulation plan, and design guidelines be submitted with the first phase of proposed development (Leal Master Plan Section 5.2.2.1). The Master Plan (Section 5.2.2.1) requires that the site design and circulation guidelines included in the project-wide design guidelines address emergency and fire access. Furthermore, the focused traffic studies required by mitigation measure **MM 3.2.1b** would address emergency access for future development projects. Therefore, this impact would be reduced to **less than significant**.

Threshold Discussion 3.2.6 The project would be considered to have a significant impact if it would conflict with policies, plans, or programs supporting alternative transportation or increase demand for transit facilities greater than planned capacity. This is considered a **less than significant** impact. (Threshold 6)

The proposed project is consistent with adopted General Plan policies related to non-motorized transportation in the area in that the Master Plan includes facilities to support bicycles and pedestrians on-site. The Master Plan allows a mix of uses that will increase project trip internalization, and potential land use densities on the project site will support transit use in the project area.

The proposed project includes the requirement that a project-wide pedestrian and bicycle access and circulation plan be provided with submittal of the vehicular circulation plan during the first phase of proposed development (Leal Master Plan Section 4.3.8). The pedestrian and bicycle access and circulation plan is required provide pedestrian and bicycle access along all major roadways and internally within each development. In addition, pedestrian and bicycle access is required to be consistent with Chapters 4 and 5 of the Eastvale Design Standards and Guidelines for residential and nonresidential site design.

Riverside Transit Agency Routes 3 and 29 currently provide access to the project site. The Master Plan (Section 5.2.2.1) requires that project-wide design guidelines be submitted during the first phase of proposed development and that these include site design and circulation guidelines addressing transit facilities and access.

In addition, mitigation measure **MM 3.2.1b** as included in the Leal Master Plan Mitigation Program requires future development projects to prepare focused traffic studies which would address site- and project-specific impacts to pedestrian, transit, and bicycle facilities.

Mitigation measure **MM 3.2.1b** would ensure that future development would not decrease the performance of alternative modes of transportation, including bicycle, pedestrian, and transit facilities. Furthermore, the project does not conflict with policies supporting alternative modes of transportation. Therefore, this impact would be reduced to **less than significant**.

3.2.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.2.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to cumulative traffic volumes in the region, resulting in significant impacts to level of service and degradation of traffic operations. This is considered a **cumulatively considerable** impact. (Threshold 7)

3.2 TRANSPORTATION AND TRAFFIC

The setting for the cumulative analysis includes approved and pending projects in the project area as discussed and shown in Table 2-2- of the traffic impact assessment. **Table 3.2-2** summarizes traffic volume, volume-to-capacity ratio, and level of service on project area roadway segments under currently anticipated cumulative conditions and cumulative conditions anticipated after implementation of the proposed project. As shown, the addition of project traffic is expected to degrade traffic operations at seven roadway segments:

- From LOS D to LOS E at Limonite Avenue between Archibald Avenue and Harrison Avenue
- From LOS E to LOS F at Limonite Avenue between Harrison Avenue and Scholar Way
- From LOS E to LOS F at Limonite Avenue between Scholar Way and Hamner Avenue
- From LOS C to LOS F at Hamner Avenue between Limonite Avenue and Bellegrave Avenue
- From LOS C to LOS D at I-15 south of Limonite
- From LOS C to LOS D at I-15 north of SR 60
- From LOS C to LOD D at Cantu-Galleano Ranch Road between I-15 Ramps and Hamner Avenue

In addition, the project adds traffic to two roadway segments already operating at LOS F: Limonite Avenue between Hamner Avenue and the I-15 southbound ramp and Limonite Avenue between the I-15 northbound ramps and Wineville Avenue.

The resulting level of service at these roadway segments would conflict with the performance standard of LOS C on local roadways as identified in the City's General Plan and in the proposed Master Plan. This impact is **cumulatively considerable**.

**TABLE 3.2-2
CUMULATIVE ROADWAY LEVEL OF SERVICE – TRANSPORTATION IMPACT ASSESSMENT**

Roadway Segment	Cumulative Lanes	Cumulative Conditions			Cumulative Plus Project Conditions		
		Volume	V/C	LOS	Volume	V/C	LOS
1. Limonite Avenue: Archibald Avenue to Harrison Avenue	6	44,000	0.82	D	50,300	0.93	E
2. Limonite Avenue: Harrison Avenue to Scholar Way	6	50,780	0.94	E	57,080	1.06	F
3. Limonite Avenue: Scholar Way to Hamner Avenue	6	48,960	0.91	E	80,460	1.49	F
4. Limonite Avenue: Hamner Avenue to I-15 Ramps	6	69,110	1.28	F	97,460	1.81	F
5. Limonite Avenue: I-15 Ramps to Wineville Avenue	6	65,010	1.21	F	71,310	1.32	F
6. Hamner Avenue: Citrus Street to Schleisman Road	6	25,400	0.47	C	31,700	0.59	C

3.2 TRANSPORTATION AND TRAFFIC

Roadway Segment	Cumulative Lanes	Cumulative Conditions			Cumulative Plus Project Conditions		
		Volume	V/C	LOS	Volume	V/C	LOS
7. Hamner Avenue: Schleisman Road to 68th Street	6	15,030	0.28	C	21,330	0.40	C
8. Hamner Avenue: 68th Street to Limonite Avenue	6	22,730	0.42	C	25,880	0.48	C
9. Hamner Avenue: Limonite Avenue to Bellegrave Avenue	6	31,890	0.59	C	60,240	1.12	F
10. Scholar Way: Limonite Avenue to 68th Street	2	6,860	0.53	C	10,010	0.77	C
11. I-15: South of Limonite Avenue	6	81,750	0.70	C	94,350	0.80	D
12. I-15: Limonite Avenue to Cantu-Galleano Ranch Road	6	81,340	0.69	C	90,790	0.77	C
13. I-15: North of SR 60	8	127,570	0.79	C	137,020	0.85	D
14. Cleveland Avenue: Bellegrave Avenue to Limonite Avenue	4	2,810	0.22	C	5,960	0.46	C
15. SR 60: West of I-15	10	78,910	0.39	C	88,360	0.44	C
16. SR 60: East of I-15	8	83,360	0.52	C	92,810	0.58	C
17. Cantu-Galleano Ranch Rd: I-15 Ramps to Hamner Avenue	4	23,980	0.67	C	30,280	0.84	D

Source: Fehr & Peers 2015
 Shading indicates unacceptable operations.

The policies and mitigation measures described below address the potentially significant impacts of the project at each of the identified study locations.

Limonite Avenue: Archibald Avenue to Harrison Avenue; Harrison Avenue to Scholar Way; Scholar Way to Hamner Avenue; and Hamner Avenue to I-15

The TIA determined that, in order to mitigate the cumulative impacts to these five segments, Limonite Avenue would need to be widened beyond six lanes, which would be inconsistent with the City’s General Plan as discussed under Impact 3.2.1 above. Therefore, widening the roadway to operate at LOS C under cumulative conditions is not feasible.

The planned widening of Limonite Avenue to six lanes via the TUMF program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would mitigate this congestion to the greatest extent feasible. Furthermore, City of Eastvale General Plan Policy C-3 states that cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees. However, the projected LOS would still conflict with the City’s performance standard for these roadway segments and this impact would remain **cumulatively considerable** and **significant and unavoidable**.

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Limonite Avenue: I-15 Ramps to Wineville Avenue

The TIA determined that, in order to mitigate this cumulative impact, this segment of Limonite Avenue would need to be widened to six lanes. As discussed above, although the widening of Limonite Avenue is a TUMF-designated improvement, this roadway segment is not included and is identified in the 2015 Northwest TUMF Zone Transportation Improvement Program (WRCOG 2015) as having an ultimate width of four lanes. Additionally, this roadway segment is outside of Eastvale. As such, neither the City nor any developer can guarantee implementation of any mitigation measure to widen the roadway segment. As such, the project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

Hamner Avenue: Limonite Avenue to Bellegrave Avenue

The TIA determined that, in order to mitigate this impact, Hamner Avenue would need to be widened beyond the six lanes that are planned for in the City's General Plan (Table C-1 and Figure C-1 of Chapter 4, Circulation and Infrastructure). Therefore, widening the roadway to operate at LOS C under cumulative conditions is not feasible.

Mitigation measure **MM 3.2.1c** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be responsible for widening Hamner Avenue to six lanes. Mitigation measure **MM 3.2.1b** requires that future development projects prepare focused traffic studies which would address site- and project-specific traffic impacts. However, project traffic volumes would still contribute to traffic operations on Hamner Avenue exceeding the City's level of service thresholds under cumulative conditions. As such, the project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

I-15: South of Limonite; North of SR 60

As discussed in Subsection 2.2, Regulatory Framework, RCTC has programmed the addition of one lane in each direction of Interstate 15 from SR 60 to the San Diego County line as a 2009 – 2039 Measure A Programmed Project. However, the TIA determined that, in order to mitigate the cumulative impacts to these two segments of I-15, the project would be responsible for additional freeway capacity beyond that already planned. Additionally, improvements to the freeway segments are outside the City's jurisdiction. As such, neither the City nor any developer can guarantee implementation of necessary improvements to increase freeway capacity. This impact would be considered **cumulatively considerable** and **significant and unavoidable**.

Cantu-Galleano Ranch Road: Between the I-15 Ramps and Hamner Avenue

The TIA determined that, in order to mitigate this impact, Cantu-Galleano Ranch Road would need to be widened to six lanes. Widening this roadway would be funded via the City's development impact fee program as discussed in Subsection 2.2, Regulatory Framework. Future development projects would be required to pay development impact fees and, as such, would be responsible for a fair-share contribution toward widening this segment from four lanes to six lanes. This improvement would ensure that Cantu-Galleano Ranch Road would have sufficient capacity under cumulative conditions to accommodate the projected traffic volume and meet performance standards, thus reducing this impact to **less than cumulatively considerable**.

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3.2 TRANSPORTATION AND TRAFFIC

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3.3.1 OVERVIEW

This section concludes that the proposed project would contribute to an existing air quality violation during both construction and operational activities. The proposed project would not conflict with the applicable air quality plan for the region or expose sensitive receptors to substantial pollutant concentrations or odors. Cumulative air quality impacts were determined to be significant.

3.3.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been "discharged" or "completed" with physical changes completed by a prior project/plan).

MM 3.3.5a A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for construction activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific construction-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If SCAQMD risk thresholds would be exceeded, additional measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure that construction contracts include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Construction-generated air toxics pollutant mitigation measures may include but not be limited to:

1. Limiting the amount of acreage to be graded in a single day.
2. Restricting intensive equipment usage and intensive ground disturbance to hours outside of hours typically spent at home.
3. Notifying affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocating outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such measures may include but are not limited to the relocation of

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equipment or the rescheduling of construction outside of hours typically spent at home.

Timing/Implementation: *The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities*

Enforcement/Monitoring: *City of Eastvale Planning, Building and Safety, or Public Works Departments*

MM 3.3.5b

A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for operational activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific operations-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter generated by heavy-duty haul trucks. If SCAQMD risk thresholds would be exceeded, additional mitigation measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and merchandise delivery schedule. The City shall ensure that operations include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Operations-generated air toxic pollutant mitigation measures may include but not be limited to:

1. Redesigning the project site plan to locate proposed loading dock facilities as far from sensitive receptors as possible.
2. Posting signage stating the State-mandated prohibition on all project trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program.
3. Restricting the number of daily heavy-duty haul truck deliveries.

Timing/Implementation: *The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities*

Enforcement/Monitoring: *City of Eastvale Planning, Building and Safety, or Public Works Departments*

3.3.3 THRESHOLDS OF SIGNIFICANCE

Impacts to land use are considered significant if implementation of the project would:

Threshold	Determination
1) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	Significant and Unavoidable
2) Conflict with or obstruct implementation of an applicable air quality plan.	Less Than Significant
3) Expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant with Mitigation
4) Create objectionable odors affecting a substantial amount of people.	Less Than Significant
5) 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).	Cumulatively Considerable and Significant and Unavoidable

The significance criteria established by the applicable or air pollution control district, South Coast Air Quality Management District (SCAQMD), may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if a 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. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use developments, which are applicable to the proposed project, as shown in **Table 3.3-1**.

**TABLE 3.3-1
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)

Carbon Monoxide (CO) Hot-Spot Analysis

In addition to the daily thresholds listed above, the proposed project would also be subject to the ambient air quality standards. These standards are addressed through an analysis of localized carbon monoxide (CO) impacts. The California 1-hour and 8-hour CO standards are:

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

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The significance of localized impacts depends on whether ambient CO levels in the vicinity of a project are above state and federal CO standards. CO concentrations in Eastvale no longer exceed the California or national ambient air quality standards criteria, and the South Coast Air Basin (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 nitrogen dioxide (NO₂), CO, coarse particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) generated at new development sites (off-site mobile source emissions are not included in 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 ambient air quality standard. 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. Eastvale is located in SCAQMD SRA 23. **Table 3.3-2** shows the localized significance thresholds for a 1-acre, 2-acre, and 5-acre project site in SRA 23 with sensitive receptors located within 82 feet (25 meters) of a project site.

TABLE 3.3-2
LOCAL SIGNIFICANCE THRESHOLD (LST) IMPACTS – POUNDS PER DAY

Project Size	NO _x	CO	PM ₁₀	PM _{2.5}
1 Acre (construction/operations)	118 / 118	602 / 602	4 / 1	3 / 1
2 Acres (construction/operations)	170 / 170	883 / 883	7 / 2	4 / 1
5 Acres (construction/operations)	270 / 270	1,577 / 1,577	13 / 4	8 / 2

Source: SCAQMD 2009

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 1 in 1 million or 10 in 1 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.
- Any project that could emit an air contaminant not currently regulated by SCAQMD rules but that is on the federal or state air toxics list.

3.3.4 METHODOLOGY

Air quality impacts were assessed in accordance with methodologies recommended by the California Air Resources Board (CARB) and the SCAQMD. Criteria air pollutant emissions were modeled using the California Emissions Estimator Model (CalEEMod) (see **Appendix 3.3-A**). CalEEMod is a statewide land use emissions computer model designed to quantify potential

criteria pollutant emissions associated with both construction and operation from a variety of land use projects.

3.3.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.3.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of construction activity. This impact would be **potentially significant**. (Threshold 1)

Development of the Leal Master Plan would include the potential construction of hotels, hundreds of multi-family homes, and nonresidential land uses over approximately 160 acres of land. 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 PM₁₀ 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 PM₁₀ and PM_{2.5} emissions. Off-road construction equipment is often diesel-powered and can be a substantial source of nitrogen oxide (NO_x) emissions, in addition to exhaust PM₁₀ and PM_{2.5} emissions. Worker commute trips and architectural coatings are dominant sources of reactive organic gas (ROG) emissions.

Quantifying the air quality pollutant emissions from future, short-term, temporary construction activities allowed under the proposed Master Plan is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc., which are not currently determined. However, depending on how development proceeds, construction-generated emissions associated with development of the Master Plan area could potentially exceed SCAQMD thresholds of significance. Therefore, future project-level analyses of air quality impacts, in accordance with California Environmental Quality Act (CEQA) requirements, would be conducted on a case-by-case basis as individual, future development projects allowed under the Master Plan proceed. The SCAQMD has promulgated methodology protocols for the preparation of air quality analyses. For instance, the SCAQMD has adopted thresholds of significance depicting the approximate level of construction-generated emissions that would result in a potentially significant impact (i.e., violation of an ambient air quality standard) for each pollutant of concern in the SoCAB (see **Table 3.3-1** above). The significance criteria established by the SCAQMD may be relied upon to make a determination of impact significance level. In addition, the SCAQMD recommends appropriate emissions modeling input parameters for the SoCAB in addition to other recommended procedures for evaluating potential air quality impacts during the environmental review process consistent with CEQA requirements.

Projects estimated to exceed SCAQMD significance thresholds are required, per Eastvale General Plan Policy AQ-17, to implement mitigation measures in order to reduce air pollutant emissions as much as feasible. Such measures could include the requirement that all construction equipment employ the use of the most efficient diesel engines available, which are able to reduce NO_x, PM₁₀, and PM_{2.5} emissions by 60–90 percent (e.g., EPA-classified Tier 3 and/or Tier 4 engines¹), and/or that construction equipment be equipped with diesel particulate

¹ NO_x emissions are primarily associated with use of diesel-powered construction equipment (e.g., graders, excavators, rubber-tired dozers, tractor/loader/backhoes). The Clean Air Act of 1990 directed the EPA to study, and regulate if

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filters. Furthermore, all development projects in the South Coast Air Basin are subject to SCAQMD rules and regulations adopted to reduce air pollutant emissions. For example, SCAQMD Rule 403 requires all construction activities in the SoCAB to implement best available control measures for all pollutant sources, and all forms of visible particulate matter are prohibited from crossing any property line. Such control measures could include, but are not limited to, the following requirements:

- 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.
- f. A wheel washing system will be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

Additionally, SCAQMD Rule 402 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. SCAQMD Rule 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of paint, primarily by placing limits on the ROG content of various paint-type categories.

As previously mentioned, the quantification of air quality emissions from short-term, temporary construction activities associated with the proposed Master Plan is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site

warranted, the contribution of off-road internal combustion engines to urban air pollution. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the EPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the EPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards.

On May 11, 2004, the EPA signed the final rule introducing Tier 4 emission standards, which are currently phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NOx be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

plans, construction schedules, equipment requirements, etc. However, all construction projects can produce ozone precursors and nuisance dust emissions. Therefore, future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed under the Master Plan proceed. While the SCAQMD has promulgated methodology protocols for the preparation of air quality analyses, and future development projects allowed under the Master Plan that are projected to exceed SCAQMD significance thresholds are required to implement mitigation measures in order to reduce air pollutant emissions as much as feasible, SCAQMD significance thresholds may still be exceeded during project construction. Since it cannot be guaranteed that construction of future projects allowed under the Master Plan would generate air pollutant emissions below SCAQMD significance thresholds due to the programmatic and conceptual nature of the proposed project and uncertainties related to future individual projects, this is considered a **significant and unavoidable** impact.

Threshold Discussion 3.3.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of long-term operations. This impact would be **potentially significant**. (Threshold 1)

As discussed in Section 2.0, Project Description, the proposed Leal Master Plan would allow for a range of development potential. **Table 3.3-3** summarizes the emissions associated with the complete buildout of the Master Plan as described in the transportation impact assessment (Fehr & Peers 2015) prepared for the project, which is a “worst-case” scenario in terms of traffic generation and circulation, the primary source of emissions affecting air quality (see **Table 3.3-3**).

At buildout, the Master Plan would result in a maximum net increase of approximately 268 pounds per day (lbs/day) of ROG, 259 lbs/day of NO_x, 327 lbs/day of PM₁₀, and 93 lbs/day of PM_{2.5}. It is important to note that these estimates reflect combined emissions from all proposed land uses and do not reflect emissions attributable to individual projects, as none are currently proposed. However, the proposed Master Plan does not include any provisions which require that its growth potential be attained. Not all of the identified land will be available for development at any given time based on site readiness, environmental constraints, market changes, and other factors. This impact discussion assumes the “worst-case” potential under the proposed project in order to present the maximum amount of pollutant emissions possible and thus a conservative analysis.

**TABLE 3.3-3
CRITERIA POLLUTANT AND PRECURSOR EMISSIONS (MASTER PLAN BUILDOUT)**

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Leal Master Plan Buildout Conditions (Summer) – Pounds per Day						
Area Sources	151.39	0.62	54.56	0.00	0.30	0.30
Energy Sources	1.83	16.42	12.37	0.09	1.26	1.26
Mobile Sources ¹	115.10	234.01	1,133.21	4.94	325.07	91.40
Total	268.32	251.07	1,200.15	4.94	326.63	92.97
SCAQMD Potentially Significant Impact Threshold	55 pounds/day	55 pounds/day	550 pounds/day	150 pounds/day	150 pounds/day	55 pounds/day

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Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Exceed SCAQMD Threshold?	Yes	Yes	Yes	No	Yes	Yes
Leal Master Plan Buildout Conditions (Winter) – Pounds per Day						
Area Sources	151.39	0.62	54.56	0.00	0.30	0.30
Energy Sources	1.83	16.42	12.37	0.09	1.26	1.26
Mobile Sources ¹	112.41	241.55	1,109.92	4.52	325.09	91.42
Total	265.63	258.60	1,176.86	4.62	326.66	92.99
SCAQMD Potentially Significant Impact Threshold	55 pounds/day	55 pounds/day	550 pounds/day	150 pounds/day	150 pounds/day	55 pounds/day
Exceed SCAQMD Threshold?	Yes	Yes	Yes	No	Yes	Yes
Leal Master Plan Buildout Conditions (Annual) – Tons per Year²						
Area Sources	27.53	0.07	6.82	0.00	0.03	0.03
Energy Sources	0.33	2.99	2.25	0.01	0.23	0.23
Mobile Sources ¹	19.44	44.99	207.69	0.83	58.21	16.40
Total	47.31	48.07	216.77	0.84	58.48	16.67

Source: CalEEMod 2013.2.2 (see **Appendix 3.3-A**)

Notes:

1. Emission projections account for the trip generation rates identified in the transportation impact assessment prepared for the project, which estimates 63,000 average daily trips at Master Plan buildout.
2. The SCAQMD does not employ annual significance thresholds. Projected annual emission in tons per day provided for the purposes of disclosure only.

As shown in the table, buildout of the Master Plan, assuming the most conservative land use potential, would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which the SoCAB is in nonattainment. Project-level analyses of air quality impacts, in accordance with CEQA requirements, would be conducted for individual project proposals on a case-by-case basis as future development within the Master Plan area proceeds. The SCAQMD has promulgated methodology protocols for the preparation of air quality analyses. For instance, the SCAQMD has adopted thresholds which define the approximate level of operational emissions that would result in a potentially significant impact (i.e., violation of an ambient air quality standard) for each pollutant of concern in the SoCAB (see **Table 3.3-1**).

For informational purposes, **Table 3.3-4** is presented in order to show estimated emissions resultant from each individual land use allowed in the proposed Master Plan area.

**TABLE 3.3-4
CRITERIA POLLUTANT AND PRECURSOR EMISSIONS PER LAND USE**

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
660 Multi-Family Homes – Maximum Pounds per Day						
Summer Emissions	22.13	17.72	120.09	0.32	21.23	6.37
Winter Emissions	21.99	18.22	116.84	0.30	21.23	6.38
<i>Maximum Emissions per Unit</i>	<i>0.034</i>	<i>0.030</i>	<i>0.200</i>	<i>0.000</i>	<i>0.033</i>	<i>0.010</i>

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
460,000 Square Feet of General Office Space – Maximum Pounds per Day						
Summer Emissions	18.52	15.66	72.39	0.33	22.75	6.41
Winter Emissions	18.37	16.20	69.09	0.31	22.75	6.41
<i>Maximum Emissions per 1,000 Square Feet</i>	<i>0.041</i>	<i>0.040</i>	<i>0.16</i>	<i>0.001</i>	<i>0.050</i>	<i>0.014</i>
100,000 Square Feet of Civic Center – Maximum Pounds per Day						
Summer Emissions	15.18	8.21	38.58	0.17	12.01	3.37
Winter Emissions	15.09	8.49	36.95	0.16	12.01	3.37
<i>Maximum Emissions per 1,000 Square Feet</i>	<i>0.152</i>	<i>0.100</i>	<i>0.390</i>	<i>0.002</i>	<i>0.120</i>	<i>0.034</i>
450 Hotel Rooms – Maximum Pounds per Day						
Summer Emissions	22.62	19.82	51.86	0.24	13.05	4.27
Winter Emissions	22.52	20.11	50.98	0.23	13.05	4.27
<i>Maximum Emissions per Hotel Room</i>	<i>0.051</i>	<i>0.045</i>	<i>0.120</i>	<i>0.001</i>	<i>0.029</i>	<i>0.010</i>
460,000 Square Feet of Medical Office Space – Maximum Pounds per Day						
Summer Emissions	32.01	42.73	203.73	0.89	60.07	16.91
Winter Emissions	31.54	44.13	198.04	0.83	60.08	16.91
<i>Maximum Emissions per 1,000 Square Feet</i>	<i>0.070</i>	<i>0.096</i>	<i>0.443</i>	<i>0.002</i>	<i>0.131</i>	<i>0.037</i>
1,525,000 Square Feet of Shopping Center Space – Maximum Pounds per Day						
Summer Emissions	115.26	146.90	713.46	2.95	197.50	55.61
Winter Emissions	113.52	151.42	704.94	2.76	197.52	55.63
<i>Maximum Emissions per 1,000 Square Feet</i>	<i>0.076</i>	<i>0.100</i>	<i>0.468</i>	<i>0.002</i>	<i>0.130</i>	<i>0.040</i>

Source: CalEEMod 2013.2.2 (see **Appendix 3.3-A**)

Future development projects that are projected to exceed SCAQMD significance thresholds are required to implement mitigation measures, per Eastvale General Plan Policy AQ-17, in order to reduce air pollutant emissions as much as feasible.

Even if SCAQMD's recommended strategies are implemented, significance thresholds may be exceeded during individual project operations. And as shown in **Table 3.3-3**, significance thresholds are projected to be exceeded at Master Plan buildout. This is considered a **significant and unavoidable** impact.

Refer to Impact 3.3.5 for an expanded analysis of the potential to expose sensitive receptors to substantial pollutant concentrations.

Threshold Discussion 3.3.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could conflict with regional air quality management planning. Impacts would be **less than significant**. (Threshold 2)

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As part of its enforcement responsibilities, the US Environmental Protection Agency (EPA) requires each state with nonattainment areas to prepare and submit a State Implementation Plan (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.

The project site is located in the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, under the federal Clean Air Act, to reduce emissions of criteria pollutants for which the air basin is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2012 Air Quality Management Plan (AQMP). The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards.

The 2012 AQMP pollutant control strategies include emission reductions from both stationary and mobile sources. The stationary source control measures in the 2012 AQMP are based on implementation of all feasible control measures through the application of available cleaner technologies, best management practices, and incentive programs, as well as development and implementation of zero- and near-zero technologies and control methods. The mobile source strategy includes actions seeking further emission reductions from both on- and off-road mobile sources, such as accelerated penetration of zero- and near-zero emission vehicles and early retirement of older vehicles. In addition, the mobile source strategy includes research and development of advanced control technologies from various mobile sources. These AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the planning assumptions of the Southern California Association of Governments' (SCAG) 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts (SCAQMD 2013). (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.)

The proposed Master Plan would not conflict with or obstruct implementation of the 2012 AQMP, as it has been anticipated in the City General Plan. The City General Plan, updated in 2012, did not include any changes to the 2003 County of Riverside Land Use Map for Eastvale. As a result, no development beyond that previously considered in the 2003 Riverside County General Plan can occur under the 2012 General Plan. Therefore SCAG's latest growth forecasts, which were defined with reference to the 2003 Riverside County General Plan, would not be exceeded by the proposed project. The proposed Master Plan is consistent with the City's General Plan and thus does not exceed the population or job growth projections used by the SCAQMD to develop the 2012 Air Quality Management Plan. Instead, the Master Plan would instigate population growth already projected by SCAG and thus would not conflict with the growth forecast assumptions used to establish the program of rules and regulations directed at reducing air pollutant emissions and achieving California and national air quality standards in the 2012 AQMP.

In addition, it is the project's intent that the Master Plan area emerge as the city's town center, anchored by a lifestyle center and surrounded by a mixture of complementary office, civic, hotel, residential, and recreation and entertainment uses. Such a development scheme reduces air quality impacts from land use development by increasing the viability of walking, biking, and transit by allowing mixed-use projects. Mixed-use projects arrange land uses so that they reduce

reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use. This impact is **less than significant**.

Threshold Discussion 3.3.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to localized concentrations of carbon monoxide that would exceed applicable ambient air quality standards. Impacts would be **less than significant**. (Threshold 3)

A CO hot-spot analysis is needed to determine whether the change in the level of service (LOS) of a transportation facility as a result of the proposed project would have the potential to result in exceedances of the California or national ambient air quality standards (CAAQS or NAAQS). It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the project vicinity have steadily declined.

Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested transportation facilities that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or hot spots, are typically associated with facilities that are projected to operate at unacceptable levels of service during the peak commute hours.² Modeling is therefore typically conducted for roadways or intersections that are projected to operate at unacceptable levels of service during peak commute hours.

For the purpose of this CO hot-spot analysis, the transportation impact assessment (Fehr & Peers 2015) was reviewed in order to identify any project-affected facility declines in level of service. If the defined level of service at a project-affected transportation facility (i.e., roadway segment) declines from LOS A, B, C, or D to LOS E or F, or if the volume-to-capacity (V/C) ratio increases by 2 percent or more as a result of a proposed project for intersections rated LOS E or worse, the project would pose a potentially significant impact in terms of CO hot spots and specific CO modeling would be required for an accurate significance determination. In other words, the proposed project would result in a less than significant impact to air quality for local CO if:

- Traffic generated by the proposed project would not result in deterioration of roadway segment level of service to LOS E or F; or
- The project would not contribute additional traffic to a roadway that already operates at LOS of E or F.

Based on the transportation impact assessment prepared for the Leal Master Plan, the proposed project would increase the cumulative project-area average daily traffic on the following facilities, causing these facilities to degrade to LOS E or F:

² Level of service (LOS) is a measure used by traffic engineers to determine the effectiveness of transportation infrastructure. LOS is most commonly used to analyze transportation facilities by categorizing traffic flow with corresponding safe driving conditions. LOS A is considered the most efficient level of service and LOS F the least efficient.

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- Limonite Avenue: Archibald Avenue to Harrison Avenue
- Hamner Avenue: Limonite Avenue to Bellegrave Avenue

Based on the transportation impact assessment, the proposed project would increase the cumulative project-area average daily traffic V/C ratio by 2 percent or more on the following facilities that already operates at LOS E or F:

- Limonite Avenue: Harrison Avenue to Scholar Way
- Limonite Avenue: Scholar Way to Hamner Avenue
- Limonite Avenue: Hamner Avenue to I-15 Ramps
- Limonite Avenue: I-15 Ramps to Wineville Avenue

Since the facilities listed above are either projected to operate at an unacceptable level of service with project implementation or increase the V/C ratio of facilities that already operate at an unacceptable level of service by more than 2 percent with project implementation, CO hot-spot modeling was conducted based on peak traffic volumes for standard operating conditions. To ensure a conservative analysis, predicted 1-hour and 8-hour CO concentrations were calculated assuming background CO concentrations of 2.5 and 1.5 parts per million (ppm), respectively, based on the most recent available data obtained from the nearest monitoring station that monitors CO.³ A persistence factor of 0.7 was used to convert predicted hourly concentrations to 8-hour concentrations. A fleet average emission factor of 6.3 grams was obtained from CARB's EMFAC2014 emissions model. The predicted 1-hour and 8-hour CO concentrations for future cumulative conditions are summarized in **Table 3.3-5**.

**TABLE 3.3-5
PREDICTED LOCAL MOBILE SOURCE CARBON MONOXIDE CONCENTRATIONS – FUTURE CONDITIONS**

Roadway Segment	Predicted CO Concentration (ppm)	
	1-Hour	8-Hour
Limonite Avenue: Archibald Avenue to Harrison Avenue	6.6	4.4
Limonite Avenue: Harrison Avenue to Scholar Way	7.3	4.9
Limonite Avenue: Scholar Way to Hamner Avenue	8.5	5.7
Limonite Avenue: Hamner Avenue to I-15 Ramps	9.6	6.5
Limonite Avenue: I-15 Ramps to Wineville Avenue	7.9	5.3
Hamner Avenue: Limonite Avenue to Bellegrave Avenue	7.5	5.0
<i>California Ambient Air Quality Standards (CAAQS)</i>	20	9
Predicted Concentrations Exceed CAAQS?	No	No

Source: CALINE4 model. Note: Predicted CO concentrations are the sums of a background component, which includes the cumulative effects of CO sources in the project area vicinity and the proposed project's contribution. Results based on emissions modeling conducted using the CALINE4 computer program. CALINE4 outputs are included as **Appendix 3.3-B**.

³ 1-hour and 8-hour background concentrations are based on the most recent measurements (year 2014) at the Van Buren-Mira Loma monitoring station.

As noted in **Table 3.3-5**, under future conditions, predicted maximum 1-hour and 8-hour CO concentrations at the roadway segments projected to operate at unacceptable levels of service would not exceed even the most stringent corresponding standards (CAAQS) of 20 and 9 ppm, respectively. Therefore, buildout of the proposed project would not contribute to predicted localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards. As a result, this impact would be considered **less than significant**.

Threshold Discussion 3.3.5 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could result in exposure of sensitive receptors to substantial toxic emissions. This would be a **potentially significant** impact. (Threshold 3)

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

Short-Term Construction Sources

Implementation of the proposed Master Plan would result in the construction of a variety of buildings and other features. This construction would result in short-term emissions of diesel particulate matter (PM), which CARB has identified as a TAC. 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.

Construction emissions are regulated by the SCAQMD, which has developed localized significance thresholds (LSTs) for several emissions generated at construction sites (see **Table 3.3-2**), including PM_{2.5}, which is 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 ambient air quality standards. 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. Future construction activities under the proposed Master Plan would be required to meet SCAQMD thresholds or to implement mitigation in adherence to Eastvale General Plan Policy AQ-17, which states that to the greatest extent possible, every project is required to mitigate any of its anticipated emissions that exceed allowable emissions as established by the SCAQMD. Examples of feasible mitigation to address short-term construction sources of TACs include but are not limited to the requirement to keep all construction equipment in proper tune in accordance with manufacturers' specifications, the use of late-model heavy-duty diesel-powered equipment during construction to the extent that it is readily available, the use of diesel-powered equipment that has been retrofitted with after-treatment products (e.g., engine catalysts), and the use of alternative-fuel construction equipment (i.e., compressed natural gas,

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liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available.

Future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed under the Leal Master Plan proceed. While the SCAQMD has promulgated methodology protocols for the preparation of air quality analyses, and future development projects allowed under the Master Plan that are projected to exceed SCAQMD localized significance thresholds are required to implement mitigation measures in order to reduce air toxics as much as feasible, localized significance thresholds may still be exceeded during construction projects, resulting in a **potentially significant** impact.

Long-Term Operational Sources

Stationary TAC Sources

Portions of the proposed project are considered more sensitive to air pollution than others because of 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. The proposed project could be considered sensitive due to the proposed residential land uses allowed under the Master Plan. According to CARB's (2004) Community Health Air Pollution Information System, there are no existing sources of TACs near the proposed project. The nearest sources of air pollutants include a custom boat manufacturing facility, which involves fiberglass coatings, 3.6 miles to the northeast; and a chrome plating facility, which involves a finishing treatment utilizing the electrolytic deposition of chromium and emits the TAC hexavalent chromium approximately 5 miles to the north. (This search was augmented by the EPA's (2013) National Air Toxics Program Release Chemical Report, which does not identify any sources of air toxics in the vicinity of the proposed project.)

These stationary sources are regulated by SCAQMD Rule 1401, which provides for the review of TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Pursuant to SCAQMD Rule 1401, stationary sources having the potential to emit TACs are required to obtain permits from the SCAQMD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAQMD rules and regulations. 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. The SCAQMD limits public exposure to TACs through a number of programs. The 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 Spot" (AB 2588) program.
- 3) Implementation of the federal Title III Toxics program.

Facilities and equipment that require permits from the 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 the SCAQMD. T-BACTs are the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for toxic air contaminants. Therefore, future sensitive receptors at the site would be exposed to insubstantial amounts of TAC concentrations from stationary sources.

Mobile TAC Sources

In April 2005, CARB released the *Air Quality and Land Use 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 Interstate 15, should be avoided when possible. This 500-foot buffer was developed to protect sensitive receptors from exposure to diesel PM and was based on traffic-related studies that showed a 70 percent drop in PM concentrations at a distance of 500 feet from the roadway. Presumably, acute and chronic risks as well as lifetime cancer risk due to diesel PM exposure are lowered proportionately. The project site is not within 500 feet of any highway or interstate (Interstate 15 is located just under 3,000 feet east of the project site). Therefore, the site lies beyond the CARB-recommended buffer area, and future receptors would not be negatively affected by TACs generated on a highway or interstate.

Implementation of the proposed Leal Master Plan would result in a variety of projects. Development projects that involve numerous heavy-duty truck trips on-site create substantial quantities of diesel PM emissions, described as a TAC, and therefore can negatively affect sensitive land uses. Operations associated with the proposed development in the Master Plan area include the potential for new commercial building space, which would require the use of delivery trucks during normal operations. Operational emissions are regulated by the SCAQMD, which has developed LSTs for several emissions generated during the operations of commercial land uses (see **Table 3.3-2**). As previously described, LSTs represent the maximum emissions at a site that are not expected to cause or contribute to an exceedance of the most stringent national or state ambient air quality standards. Future operational activities under the proposed Master Plan would be required to meet SCAQMD thresholds (see **Table 3.3-2**) or to implement mitigation in adherence to Eastvale General Plan Policy AQ-17, which states that to the greatest extent possible, every project is required to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD. Examples of feasible mitigation to address long-term sources of TACs include but are not limited to Toxic Best Available Control Technology (T-BACT), defined as methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions at the source. T-BACT can be add-on control equipment or modification of the production processes or methods of a source. This includes fuel cleaning or treatment and innovative fuel combustion techniques. BACT may be a design, equipment, work practice, or an operational standard.

In addition, the EPA and the National Highway Transportation Safety Administration (NHTSA) have announced fuel economy standards for medium- and heavy-duty trucks, which apply to vehicles in model years 2014–2018. The NHTSA has adopted standards for fuel consumption tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this program will reduce fuel

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consumption, and thus air pollutant emissions, for affected vehicles by 6 percent to 23 percent. While this analysis does not rely on this program for purposes of mitigating impacts, the program should help further reduce the long-term operational impacts of the Master Plan.

Future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed under the Master Plan proceed. While the SCAQMD has promulgated rules for the preparation of air quality analyses, and future development projects allowed under the Master Plan that are projected to exceed SCAQMD localized significance thresholds are required to implement mitigation measures in order to reduce air toxics as much as feasible, SCAQMD localized significance thresholds may still be exceeded during the operations of future projects, resulting in a **potentially significant** impact without the implementation of mitigation measures **MM 3.3.5a** and **3.3.5b**, listed at the beginning of this section. With implementation of these measures, the project's impacts are less than significant.

Future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed under the Leal Master Plan proceed. Mitigation measures **MM 3.3.5a** and **3.3.5b** (shown at the beginning of this section) require a site-specific analysis of potential air toxics impacts based on specific project details of future development, and the development of adequate mitigation, to address any such impacts. These mitigation measures preclude future development that cannot be mitigated to levels below SCAQMD risk thresholds. As a result, implementation of these mitigation measures would reduce the impact to a **less than significant** level.

Threshold Discussion 3.3.6 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could result in exposure of sensitive receptors to substantial odorous emissions. The impact would be **less than significant**. (Threshold 4)

Subsequent land use activities associated with implementation of the proposed Master Plan could allow the development of uses that have the potential to produce odorous emissions during either construction or operation of future development. Additionally, subsequent land use activities may allow 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, and application of exterior paints for home improvement. These types and concentrations of odors are typical of urban communities and are not considered significant air quality impacts.

Future individual projects, including commercial, office, and residential projects, associated with implementation of the proposed Master Plan are also required to comply with SCAQMD Rule 402 to prevent occurrence of public nuisances. Any future development would be required to avoid the creation of a public nuisance from project-related odors. 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. Because these odors are short term in nature and quickly disperse into the atmosphere, this is not considered significant.

SCAQMD Rule 402 would minimize the creation of objectionable odors affecting a substantial number of people. As a result, this impact is considered **less than significant**.

3.3.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.3.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan , in combination with existing, approved, proposed, and reasonably foreseeable development in the South Coast Air Basin, could significantly contribute to cumulative increases in emissions of criteria air pollutants that could contribute to future concentrations of pollutants for which the region is currently designated nonattainment. The impact would be considered **cumulatively considerable**. (Threshold 5)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable. As discussed earlier, the proposed project would be consistent with the Air Quality Management Plan, which is intended to bring the SoCAB into attainment for all criteria pollutants. However, as evaluated under Impact 3.3.1, the project could potentially exceed the construction standards, and as described under Impact 3.3.2, the project will exceed the operational standards at buildout of the Master Plan. As such, impacts would be **cumulatively considerable** and **significant and unavoidable**.

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REFERENCES

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3.4 GREENHOUSE GASES AND CLIMATE CHANGE

3.4.1 OVERVIEW

This section concludes that the proposed project would not generate greenhouse gas (GHG) emissions to the extent of resulting in a significant impact. In addition, the proposed Leal Master Plan would not conflict with the applicable plan adopted for the purpose of reducing GHG emissions.

3.4.2 MITIGATION MEASURES

None required.

3.4.3 THRESHOLDS OF SIGNIFICANCE

As directed by the California Natural Resources Agency (CNRA), the analysis of GHG emissions in this section focuses on the cumulative impact of GHG on climate change. The CNRA's (2009) guidance on this topic states:

While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.

Impacts to land use are considered significant if implementation of the project would:

Threshold	Determination
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less Than Cumulatively Considerable
2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	Less Than Cumulatively Considerable

In order to assess the significance of a proposed project's environmental impacts, it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. Determining a threshold of significance for a project's climate change impacts poses a special difficulty for lead agencies. The science in this area is new and is evolving. At the same time, neither the state nor local agencies are specialized in this area, and there are currently no state thresholds for determining whether a proposed project has a significant impact on climate change. The CEQA Amendments do not prescribe specific significance thresholds but instead leave considerable discretion to lead agencies to develop appropriate thresholds to apply to projects within their jurisdiction.

As noted in Subsection 2.2, Regulatory Framework, Assembly Bill (AB) 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In adopting AB 32, the California Legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem. AB 32 is the only legally mandated requirement for the reduction of GHG emissions. As such, compliance with AB 32 is the adopted basis upon which the agency can base its significance threshold for evaluating the project's GHG impacts.

3.4 GREENHOUSE GASES AND CLIMATE CHANGE

Therefore, the proposed Leal Master Plan is compared to the emissions reductions goals of AB 32 to assess the significance of GHG emissions. As described in Subsection 2.2, Regulatory Framework, in 2008 the California Air Resources Board (CARB) adopted the AB 32 Scoping Plan to achieve the goals of AB 32, which determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as “business as usual” or BAU).¹ However, CARB has since released revised estimates of the expected 2020 emissions reductions which were updated to account for the economic downturn since 2008 as well as reduction measures already approved and put in place. This reduced the projected 2020 emissions and thereby revised the BAU reduction necessary to achieve AB 32’s goal of reaching 1990 levels by 2020 to 21.7 percent. (CARB also provided a lower 2020 inventory forecast that took credit for certain State-led GHG emission reduction measures already in place. When this lower forecast is considered, the necessary reduction from BAU needed to achieve the goals of AB 32 is approximately 16 percent.)

The proposed Master Plan is compared to the achievement of at least a 21.7 percent reduction in GHG emissions as compared to BAU in order to provide a conservative assessment. In order to ascertain the achievement of a 21.7 percent reduction compared to BAU, quantification of the GHG emissions projected from the anticipated buildout scenario under year 2020 conditions is required. Projects that are demonstrated to have reduced or mitigated their GHG emissions by at least 21.7 percent compared to BAU, consistent with GHG emissions reduction targets established in the CARB AB 32 Scoping Plan, would be determined to have a less than significant individual and cumulative effect on global climate change.

This analysis for the proposed project assumes year 2035 for buildout. Therefore, in addition to determining project compliance with AB 32, which set GHG reduction targets for the year 2020, the project was also evaluated for compliance with the goal of California Executive Order B-30-15 (2015) to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030 as well as the goal of California Executive Order 5-03-05 (2005) to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050. Based on these two targets, one for 2030 and one for 2050, the project’s 2035 GHG reduction target would be a 50 percent reduction from its year 2020 emissions estimate.² It is noted however, although the 2020 target has been incorporated into legislation (AB 32), the 2030 and 2050 targets have not been adopted by the state and remain only a goal of the Executive Order.

Additionally, the proposed project would be considered to result in a significant impact if it is shown to be inconsistent with the Western Regional Council of Governments (WRCOG) (2014) Subregional Climate Action Plan (CAP) and related measures.

3.4.4 METHODOLOGY

The proposed project’s GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2, computer program (see **Appendix 3.4**). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for the

¹ Business as usual (BAU) is the project’s estimated GHG emissions level in 2020 under the assumption that consumption patterns and efficiencies are maintained at their 2005 levels. Under a BAU scenario, state, regional, and project-level efforts to reduce GHG emissions are not taken into consideration; rather, the BAU assumes the year 2005 status quo.

² For the purposes of this analysis, the reduction target for the year 2035 was determined by extrapolating a year 2035 emissions inventory target from the Executive Order S-03-05 goal of an 80 percent reduction of GHG emissions from 1990 levels by 2050, as well as the Executive Order B-30-15 goal of a 40 percent reduction of GHG emissions from 1990 levels by 2030. (The 1990 GHG inventory equals 427 million metric tons. 80 percent below this level equals 85 million metric tons, and 40 percent below this level equals 256 million metric tons.)

use of government agencies, land use planners, and environmental professionals. This model was developed in coordination with the South Coast Air Quality Management District (SMAQMD) and is the most current emissions model approved for use in California by various other air districts. GHG emissions were calculated for each of the following conditions: (1) Master Plan buildout under BAU conditions described above, (2) Master Plan buildout under year 2020 conditions (patterns and efficiencies), and (3) Master Plan buildout under year 2035 conditions (patterns and efficiencies).

3.4.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.4.1 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, under year 2020 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is **less than cumulatively considerable**. (Threshold 1)

It can be stated generally that development proposed under the Master Plan would result in direct emissions of GHGs from construction. However, quantifying the specific GHG emissions from future, short-term, temporary construction activities allowed under the proposed Master Plan is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc., none of which have yet been determined.

Future project-level analyses of GHG emission-related impacts, in accordance with CEQA requirements, would be conducted on a case-by-case basis as individual, future development projects proceed.

The SCAQMD has promulgated methodology protocols for the preparation of GHG emission analyses. For instance, the SCAQMD does not recommend a construction-related significance threshold but instead recommends that quantified construction emissions be amortized for a project lifetime of 30 years and added to the quantified total of operational emissions in order to ensure GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

As discussed in Section 2.0, Project Description, the proposed Leal Master Plan would allow for a range of development potential. **Table 3.4-1** summarizes the emissions associated with the complete buildout of the Master Plan as described in the transportation impact assessment (Fehr & Peers 2015) prepared for the project, which is a “worst-case” scenario in terms of traffic generation and circulation, the primary source of GHG emissions (see **Table 3.4-1**).

As shown in **Table 3.4-1**, the project could produce 105,649 metric tons of carbon dioxide equivalent (CO₂e) annually under BAU conditions, primarily from motor vehicles that travel to and from the site. This would contribute to a net increase in GHGs from the proposed project. For purposes of this analysis, the total emissions of 105,649 metric tons of CO₂e per year are considered the BAU figure.

3.4 GREENHOUSE GASES AND CLIMATE CHANGE

**TABLE 3.4-1
GHG EMISSIONS UNDER BAU OPERATIONS (METRIC TONS PER YEAR)¹**

Emissions Source	CO ₂ e
Area Source (landscaping, hearth)	12
Energy ²	19,713
Mobile ³	79,993
Waste	3,693
Water/Wastewater	2,238
Total	105,649

Source: CalEEMod 2013.2.2 (see **Appendix 3.4**)

Notes:

1. BAU emissions projections account for development-generated emissions without any greenhouse gas reduction measures; i.e., emissions presented are not adjusted for future improved CAFÉ standards (Pavley I) and Low Carbon Fuel Standards, the 2011 Renewables Portfolio Standard, or the 2013 Building Energy Efficiency Standards.
2. The Southern California Edison Year 2005 emissions factors of 654.19 pounds of CO₂ per megawatt, 0.028 pounds of methane (CH₄) per megawatt, and 0.006 pounds of nitrous oxide (N₂O) per megawatt of energy generated (UCSB Utility & Energy Services 2012) was used to account for energy-related BAU greenhouse gas emissions.
3. Traffic generation (63,000 average daily trips) is derived from the transportation impact assessment prepared for the project.

Several State-led GHG emissions-reducing regulations have recently taken effect, and changes to regulations will continue to take effect into the near future that will substantially reduce GHG emissions. For instance, implementation of Assembly Bill 1493 (the Pavley Standard) (Health and Safety Code Sections 42823 and 43018.5) and the Low Carbon Fuel Standard (LCFS) will significantly reduce the amount of GHGs emitted from passenger vehicles by the year 2020. The Pavley Standard is aimed to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016 by requiring increased fuel efficiency standards of automobile manufacturers, and the LCFS requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California. The anticipated reductions associated with the Pavley Standard and the LCFS represent 22,872 fewer metric tons per year of GHGs attributed to the Master Plan (see **Table 3.4-2**).

The electricity provider for Eastvale, Southern California Edison (SCE), is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020, which will have the effect of reducing GHG emissions generated during energy production. For example, from 2005 to 2013, SCE increased its purchase of renewable source-generated electricity levels from 5 percent to 22 percent (CEC 2015; SCE 2006). Largely due to this strategy, SCE's reduction of its GHG emission intensity factor between business as usual and the development of the proposed project would result in 4,279 fewer metric tons per year of GHGs (459 fewer metric tons per year attributed to water/wastewater conveyance) as shown in **Table 3.4-2**. In addition, the California Energy Commission recently adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, resulting in standards that are 25 percent more efficient than previous standards for construction. Due to the 2013 Building Energy Efficiency Standards, buildout of the Master Plan would generate 1,122 fewer metric tons per year of GHGs, as shown in **Table 3.4-2**.

TABLE 3.4-2
GHG REDUCTIONS FROM APPLICATION OF RECENT REGULATIONS (2020 CONDITIONS)

Reduction Source	CO ₂ e Emissions Reductions (metric tons/year)
State-Led GHG Reducing Regulations	
AB 1493 (Pavley) and Low Carbon Fuel Standard ¹	-22,872
2011 Renewables Portfolio Standard ²	-4,279
2013 Building Energy Efficiency Standards ³	-1,122
Total	-28,273

Notes:

1. Emissions reductions from AB 1493 and the Low Carbon Fuel Standard are derived from the difference between 2005 automobile emissions factors and 2025 automobile emissions factors contained in CalEEMod version 2013.2.2.
2. Emissions reductions from the RPS are derived from the difference between SCE's business-as-usual emissions intensity factor of 654.19 pounds of CO₂ per megawatt, 0.028 pounds of CH₄ per megawatt, and 0.0062 pounds of N₂O per megawatt of energy generated and SCE's projected 2020 CO₂ emission intensity factor of 490.64 pounds of CO₂ per megawatt, 0.021 pounds of CH₄ per megawatt, and 0.004 pounds of N₂O per megawatt of energy generated (UCSB Utility & Energy Services 2012).
3. Emissions reductions from the 2013 Building Energy Efficiency Standards are derived from CalEEMod version 2013.2.2. Data output is included as **Appendix 3.4**.

State-led GHG reduction measures such as Pavley, the Low Carbon Fuel Standard, the RPS, and the California Green Building Standards would reduce project GHG emissions by 26.7 percent compared with BAU, which is beyond the 21.7 percent reduction threshold. **Table 3.4-3** summarizes project GHG reductions attributable to state regulations determining the percentage reduction needed to achieve compliance with AB 32.

TABLE 3.4-3
SUMMARY OF GHG REDUCTIONS (2020 CONDITIONS)

Emissions Reduction Summary	CO ₂ Emissions (Metric Tons/Year)
Total Business-as-Usual (BAU) Emissions	105,649
State-Led Regulatory Reduction	-28,274
Project Emissions After Reductions	77,375
Percentage Reduction from Business as Usual	26.7
Percentage Reduction Threshold for Less than Significant Determination	21.7

The GHG emissions from buildout of the Leal Master Plan under year 2020 conditions are projected to result in 77,375 metric tons of CO₂e per year (**Table 3.4-3**). As projected, emissions would be reduced by 26.7 percent from BAU, which is greater than the 21.7 percent threshold, so the Master Plan is considered consistent with the State of California's ability to meet its GHG reduction goals under AB 32. This impact is **less than cumulatively considerable**.

Threshold Discussion 3.4.2

The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, under year 2035 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is **less than cumulatively considerable**. (Threshold 1)

3.4 GREENHOUSE GASES AND CLIMATE CHANGE

As previously described, this analysis for the proposed project assumes year 2035 for buildout. Therefore, in addition to determining project compliance with AB 32, which set GHG reduction targets for the year 2020, the project was evaluated for compliance with the goal of California Executive Order B-30-15 (2015) to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030 as well as the goal of California Executive Order 5-03-05 (2005) to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050. Based on these two targets, one for 2030 and one for 2050, the project's 2035 greenhouse gas reduction target would be a 50 percent reduction from its year 2020 emissions estimate of 77,375 metric tons per year (see **Table 3.4-3**).

Table 3.4-4 shows a comparison between the projected GHG emissions attributable to Master Plan buildout under 2020 conditions and 2035 conditions. As shown, emissions modeling estimates a 4 percent reduction in GHG emissions associated with Master Plan buildout under 2020 conditions and under 2035 conditions, entirely as the result of less-polluting vehicles in the future. This is below the 50 percent reduction target.

TABLE 3.4-4
MASTER PLAN BUILDOUT GHG EMISSIONS – YEAR 2020 CONDITIONS AND YEAR 2035 CONDITIONS
(METRIC TONS PER YEAR)

Emission Source	CO ₂ e Year 2020 Conditions ¹	CO ₂ e Year 2035 Conditions ²	Percentage Reduction
Area Source (landscaping, hearth)	11	11	
Energy	14,771	14,771	
Mobile	57,121	54,063	
Waste	3,693	3,693	
Water/Wastewater	1,779	1,779	
Total	77,375	74,317	-4%

Source: CalEEMod 2013.2.2 (see **Appendix 3.4**).

Notes:

1. Emissions account for AB 1493, LCFS, RPS, and 2013 Building Energy Efficiency Standards under the year 2020 condition.
2. Emissions account for 2035 vehicle fleet modernization associated with the turnover of older, less efficient makes and models. All other emission sources are limited to the 2020 condition due to lack of specific GHG-reducing regulatory mechanisms for target years beyond 2020.

As previously stated, the State's 2020 target has been incorporated into legislation (AB 32), while the 2030 and 2050 targets identified in Executive Orders S-03-05 and B-30-15 have not been adopted by the State and remain only goals. (Technically, a governor's Executive Order does not have the effect of new law but can only reinforce existing laws.) As a result of the AB 32 legislation, the State's 2020 reduction target is backed by the adopted AB 32 Scoping Plan, which provides a specific regulatory framework of requirements for achieving the 2020 reduction target. For instance, previously described State-led GHG reduction measures such as the Low Carbon Fuel Standard and the Renewables Portfolio Standard are largely driven by the AB 32 Scoping Plan. Executive Orders S-03-05 and B-30-15 do not have any such framework and therefore provide no emissions reduction mechanisms that can be applied to the analysis of land use projects for the purpose of meaningful emissions estimates.

Executive Order B-30-15 states that "all State agencies with jurisdiction over sources of [GHG] emissions [to]... implement measures, pursuant to statutory authority, to achieve reductions of [GHG] emissions to meet the 2030 and 2050 [GHG] emissions reductions targets." It directs CARB to "update the Climate Change Scoping Plan to express the 2030 target and it directs the

Natural Resources Agency to update “Safeguarding California” (the State’s climate adaptation strategy) every three years, as specified. Among its other directives, Executive Order B-30-15 provides that “state agencies’ planning and investment shall be guided by the... principle [that] priority should be given to actions that both build climate preparedness and reduce [GHG] emissions.”

Therefore, the percent reduction of GHG emissions shown in **Table 3.4-4** is a preliminary estimate and would be anticipated to increase when specific reduction mechanisms are adopted by CARB in the form of an updated Climate Change Scoping Plan, as stipulated by Executive Order B-30-15. Until such time, lead agencies must rely on their own discretion in order to determine whether individual land use projects are consistent with the overall goal of continued GHG emission reductions beyond the year 2020.

The EIR prepared for the Eastvale General Plan (SCH#2011111061) identified 919,872 metric tons of GHG emissions generated annually as a result of the full city buildout, which was projected to potentially occur around the year 2032. This projection of GHG emissions attributable to all land uses in the city included a generalized land use assumption of office, civic, hotel, and multi-family residential development on the project site. Therefore, the potential land use mix proposed by the Master Plan was considered in the City General Plan (Eastvale 2012). Since adoption of the City General Plan, Eastvale has voluntarily become a member jurisdiction participating in the WRCOG’s Subregional Climate Action Plan (CAP) process, which was adopted in June 2014 and establishes policies and priorities to enable member jurisdictions to employ strategies that successfully reduce GHG emissions. The CAP addresses overall GHG emissions in Western Riverside County by preparing GHG inventories and forecasts, identifying subregional GHG reduction targets of 15 percent below current emissions by 2020 and 49 percent below current emissions by 2035 (specific CAP GHG reduction measures applicable to the City are described below). Therefore, as a result of City efforts, GHG emissions attributable to the community as a whole are projected to continue to decrease beyond 2020.

Furthermore, the proposed Master Plan itself would reduce the environmental impact (including GHG emissions) of development on the site 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, Master Plan Chapter 4, Development Standards, states that all future development projects in the Master Plan area will have to submit a pedestrian and bicycle access and circulation plan along with the submittal of the vehicular circulation plan. The plan will be required to implement pedestrian and bicycle access along all major roadways and internally within each development to allow connectivity from the streets to the businesses, as well as pedestrian and bicycle connections from the streets to the interior of the development. Sidewalks on each street section are also required, as is consideration of the location and preferred orientation of transit services. In addition, City General Plan Policy LU-29 states that commercial uses (such as those allowed under the proposed Master Plan) should be located near transportation facilities and include facilities to promote the use of public transit (such as bus turnouts, bus shelters, etc.). Also, General Plan Policy C-25 requires the incorporation of public transit service in the design of developments identified as major trip attractions (i.e., retail and employment centers that could potentially occur within the Master Plan area).

This impact is **less than cumulatively considerable**.

Threshold Discussion 3.4.3 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan could conflict with the goals of the Western Riverside Council

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of Governments Subregional Climate Action Plan. This impact is **less than cumulatively considerable**. (Threshold 2)

The WRCOG (2014) Subregional CAP establishes a community-wide emissions reduction target of 15 percent below 2010 by the year 2020, following guidance from the California Air Resources Board and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined that this approach is consistent with the statewide AB 32 goal of reducing emissions to 1990 levels by the year 2020.

Progress toward achieving the 2020 emissions reduction target will be monitored over time through preparation of an annual memorandum documenting program implementation and performance. Following each annual report, WRCOG and the participating jurisdictions may adjust or otherwise modify the strategies to achieve the reductions needed to reach the target. Additionally, there will be a comprehensive inventory update prior to 2020 to track overall progress toward meeting the GHG reduction target.

To meet emissions reduction targets, the WRCOG Subregional CAP considers existing programs and policies in the subregion that achieve GHG emissions reductions in addition to new GHG reduction measures. Several measures apply to participating jurisdictions uniformly because they respond to adoption of a state law (e.g., the Low Carbon Fuel Standard) or result from programs administered at the discretion of a utility serving multiple jurisdictions (e.g., utility rebates). For other, more discretionary measures, participating jurisdictions, including Eastvale, have voluntarily committed to a participation level that could be implemented in their community. For example, as a participating member jurisdiction of the Subregional CAP process the City is requiring all new development to install shade trees on the development site as a condition of project approval (CAP Measure E-3), increase the amount of bike lanes in the city by 10 percent compared with existing conditions (CAP Measure T-1), increase bicycle parking (CAP Measure T-2), increase fixed-route bus service by 10 percent compared with existing conditions (CAP Measure T-5), synchronize traffic signals (CAP Measure T-7), increase the jobs/housing ratio in the city by 25 percent (CAP Measure T-9), and provide residential green bins for the collection and transport of organic waste for compost (CAP Measure SW-1).

No aspect of the proposed project would conflict with these goals. The proposed project supports the intent of these CAP measures.

As noted earlier in this analysis, all future development projects in the Master Plan area will be required to submit a pedestrian and bicycle access and circulation plan along with the submittal of the vehicular circulation plan.

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG emissions. This impact is **less than cumulatively considerable**.

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3.4 GREENHOUSE GASES AND CLIMATE CHANGE

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3.5.1 OVERVIEW

This section concludes that the project would facilitate a permanent substantial change in the existing visual character of the Master Plan area from dairy/agricultural to developed suburban uses but that altering the existing visual character of the site would not necessarily degrade it, as the surrounding area is similarly developed. The proposed Leal Master Plan establishes specific parameters for the design and quality of the project area, which must be met by any future development. In addition, adherence to the Eastvale Municipal Code and the mitigation measure included in the Leal Master Plan Mitigation Program would require future development plans to minimize and reduce impacts from new light and glare sources. Compliance with the provisions of the Master Plan, as well as the mitigation measure, would ensure that both project and cumulative impacts would be reduced to a less than significant level.

3.5.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been “discharged” or “completed” with physical changes completed by a prior project/plan).

MM 3.5.1 Nonglare glass shall be used in all nonresidential buildings to minimize and reduce impacts from glare. Buildings that are allowed to use semi-reflective glass must be oriented so that the reflection of sunlight is minimized. Types of nonglare glass shall be specified on final development plans.

Timing/Implementation: Prior to approval of final development plans

Enforcement/Monitoring: City of Eastvale Planning Department

3.5.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Have a substantial adverse effect on a scenic vista.	No Impact
2) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.	No Impact
3) Substantially degrade the existing visual character or quality of the site and its surroundings.	Less Than Significant
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant with Mitigation
5) Contribute to the alteration of the visual character of the region, impacts to scenic vistas, and increased glare/lighting.	Less Than Cumulatively Considerable with Mitigation

3.5 AESTHETICS, LIGHT, AND GLARE

3.5.4 METHODOLOGY

The existing visual character of the project area was determined through a review of aerial photographs as well as field review of the Master Plan area and the surrounding area. Evaluation of the proposed Master Plan's potential aesthetic, light, and glare impacts was based on the potential for the project site to develop consistent with the proposed Master Plan, as well as the City of Eastvale General Plan, Design Guidelines, and Zoning Code. The analysis identifies and describes how specific mitigation measures, as well as other City regulations and standards, provide enforceable requirements and/or performance standards that address and avoid or minimize significant impacts.

It is important to note that what one person may consider a scenic resource, another may not find so. Similarly, what one person may believe is a significant adverse impact on scenic resources may be considered to be an improvement in character to another person. Due to the subjective nature of this type of analysis, this section assumes that any permanent substantial change from the existing visual character of an area is considered to be potentially significant.

3.5.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.5.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would have a substantial adverse effect on a scenic vista. The project will have **no impact** on a scenic vista. (Threshold 1)

Scenic vistas include natural features such as topography, watercourses, rock outcrops, and natural vegetation, as well as man-made alterations to the landscape. The Master Plan area currently contains an operating dairy and horse farm and does not contain unique visual features that would distinguish it from the surrounding area. The project area's surrounding vicinity is developed and suburban in nature and consists of typical residential, commercial, and retail development. Neither the project site nor the surrounding area includes a vista or viewpoint that would be considered scenic.

Furthermore, there are no designated scenic vistas identified in the Eastvale General Plan. The Santa Ana River is identified as a scenic resource; however, the Master Plan area is approximately 2 miles north of the riparian area surrounding the river and the intervening suburban development prevents any view of the Santa Ana River from the project site and vice versa. Future development within the Master Plan area would not obscure views to the Santa Ana River from other properties. Similarly, the City's General Plan identifies the San Bernardino Mountains as a visual landmark; however, the project site is well below the elevation of the mountains and is relatively flat topographically. As such, future development of the proposed Master Plan area would not result in an impediment to views of the distant mountains.

Therefore, the future development of commercial, office, hotel, civic, and residential uses on the project site will not have a substantial adverse effect on a scenic vista. **No impact** would occur.

Threshold Discussion 3.5.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would substantially damage scenic resources within a state scenic highway. There are no eligible or officially designated scenic highways in the vicinity of the project site and **no impact** would occur. (Threshold 2)

According to the California Department of Transportation's (2015) Scenic Highway Mapping System, there are no eligible or officially designated scenic highways in the vicinity of the project site. The nearest scenic highway to the project site is State Route (SR) 71, which is an eligible state scenic highway (not officially designated) and is located approximately 11.4 miles west of the project site. In addition, the Master Plan area does not include any trees, rock outcroppings, or historic buildings that would be considered scenic resources. Therefore, future development of commercial, office, hotel, civic, and residential uses on the project site will not substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **No impact** would occur.

Threshold Discussion 3.5.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would substantially degrade the existing visual character or quality of the site and its surroundings. This impact is **potentially significant**. (Threshold 3)

Although the proposed project does not include specific development proposals, it does facilitate the future development of commercial, office, hotel, civic, and residential uses on land currently used primarily for dairy/agricultural uses. This would permanently alter the existing visual character of the project site from dairy/agricultural land with more open views to urban and developed. This change would be a permanent substantial change from the existing visual character of the site.

However, the Master Plan area is already surrounded by suburban development and represents one of the last remaining undeveloped areas of the city. As such, altering the existing visual character to a more developed one would not be out of character with the suburban/developed nature and visual character of the surrounding area.

All future development plans and projects would be required to comply with the Leal Master Plan, which does not specify a design theme or style, but rather requires that overall design quality meets the City's goals for the project, as outlined in Master Plan Chapter 2, Project Character. The chapter sets forth desired project characteristics and the level of quality, including requirements for site design, public spaces, water features, buffers/adjacencies, screens/fences/walls, landscaping, architecture, exterior materials and colors, street furnishings, thematic features, and signage.

Stage 2 of the Staged Development Process identified in the Leal Master Plan would include detailed plans for the first phase(s) of development, including project-wide and development-specific development standards and design guidelines. According to the Master Plan, "The intent of the project-wide design guidelines is to ensure that the Leal Master Plan is developed with a high level of quality and to establish a framework that provides physical continuity throughout the various developments." The project-wide design guidelines will address site design and circulation, and thematic features including lighting. In addition, each specific development project proposed would be required to submit a development-specific package with design guidelines specific to each land use type proposed. The development-specific design guidelines must include enough detail to provide adequate direction for the preparation of detailed development plans that demonstrate compliance with the desired aesthetic quality expressed in Master Plan Chapter 2. Both the project-wide and the development-specific design guidelines would be required to be consistent with the City's General Plan policies discussed in Section 2.2, Regulatory Framework, of this EIR and with the Eastvale Design Standards and Guidelines.

3.5 AESTHETICS, LIGHT, AND GLARE

Therefore, while the proposed Master Plan would facilitate a permanent substantial change in the existing visual character of the site from dairy/agricultural to developed suburban uses, altering the existing visual character of the site would not necessarily degrade it. The proposed Master Plan establishes specific parameters for the design and quality of the project area, which must be met by any future development. Compliance with the provisions of the Master Plan, which also would comply with General Plan policies and the Eastvale Design Standards and Guidelines, will ensure that future development would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, this impact would be reduced to a **less than significant** level.

Threshold Discussion 3.5.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would introduce new sources of substantial light and/or glare that could adversely affect day or nighttime views in the area. This impact is **potentially significant**. (Threshold 4)

As discussed under Impact 3.5.1, the project would facilitate the future development of commercial, office, hotel, civic, and residential uses on land currently used primarily for dairy/agricultural uses. This development would introduce new sources of substantial light and/or glare that could adversely affect day or nighttime views in the area if not properly designed.

Pursuant to Section 120.05.050, Outdoor Lighting, in Chapter 120.05, Development Standards, of the Eastvale Municipal Code, all outdoor lighting fixtures for new multifamily residential, commercial, industrial, mixed use and public/quasi-public uses are required to demonstrate consistency with the City's outdoor lighting requirements. Eastvale Municipal Code Section 120.05.050 provides enforceable requirements and/or performance standards that address light impacts, including but not limited to requiring all outdoor lighting to be constructed with full shielding and/or recessed to reduce light trespass to adjoining properties and requiring each fixture to be directed downward and away from adjoining properties and public rights-of-way, so that no light fixture directly illuminates an area outside of the site. The requirements also specify that outdoor lighting be designed to illuminate at the minimum level necessary for safety and security and to avoid the harsh contrasts in lighting levels between the project site and adjacent properties. In addition, mitigation measure **MM 3.5.1** as included in the Mitigation Program for the project requires future development plans and/or projects to utilize nonglare glass in all nonresidential buildings to minimize and reduce impacts from glare.

Adherence to these mitigation measures as included in the project's Mitigation Program would ensure that future development plans and/or projects would not adversely affect day or nighttime views. Therefore, impacts would be reduced to a **less than significant** level.

3.5.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.5.5 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, in combination with other reasonably foreseeable development projects in the region, would contribute to the alteration of the visual character of the region, impacts to scenic vistas, and increased glare/lighting. This impact is considered **potentially significant**. (Threshold 5)

The cumulative impact analysis herein focuses on whether the Master Plan's contribution to regional visual resource impacts would result in a cumulatively considerable environmental impact. The project's impact would be cumulatively considerable if, when considered with other existing, approved, proposed, and reasonably foreseeable development in the region, it would result in substantial alteration of the visual character of the region, significant impacts to scenic vistas, or substantial increases in daytime glare and nighttime lighting.

The western Riverside County region is anticipated to experience growth in association with new development, which would result in cumulatively considerable changes in the visual character and scenic views of the region, as well as increases in the amount of light and glare. As undeveloped areas transition from a rural to an urban character, existing viewsheds in the western portion of the county and incorporated cities would be affected and existing views of rural uses and open spaces would change to views of urban uses. Development under the proposed Master Plan would contribute to this trend in alteration of the area's visual character by converting open space and rural uses to urban development. This development would also contribute to changes in nighttime lighting and illumination levels in the region. It should be noted that these changes have been under way in the Eastvale area in recent years and the Master Plan area represents one of the last undeveloped areas of the city.

As discussed under Impact 3.5.2 above, the proposed Master Plan establishes specific parameters for the design and quality of the project site, which must be met by any future development. In addition, future projects would be required to be consistent with the City's outdoor lighting requirements and mitigation measure **MM 3.5.1** requires future development plans and/or projects to utilize nonglare glass in all nonresidential buildings to minimize and reduce impacts from glare.

Compliance with the provisions of the Master Plan, the City's Municipal Code, and with the mitigation measure would substantially reduce any contribution to significant cumulative impacts associated with alteration of the visual character of the region and increased glare/lighting in the region. Therefore, this impact would be reduced to a **less than cumulatively considerable** level.

3.5 AESTHETICS, LIGHT, AND GLARE

REFERENCES

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3.6.1 OVERVIEW

This section concludes that, depending on the specific land uses developed, equipment used, and site design of the project, noise generated by future development would increase ambient noise levels in the project vicinity and could generate noise levels in excess of standards established in the City of Eastvale General Plan Noise Element and/or the City of Eastvale Noise Ordinance (see Subsection 2.2, Regulatory Framework). In most cases, adherence to mitigation measures included in the Leal Master Plan Mitigation Program would ensure future development adequately mitigates adverse impacts and would reduce impacts to a less than significant level. However, full mitigation of transportation-related noise impacts on existing uses may not be feasible; this impact would remain significant and unavoidable and cumulatively considerable.

3.6.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been "discharged" or "completed" with physical changes completed by a prior project/plan).

MM 3.6.1 An acoustical assessment shall be prepared that evaluates potential environmental noise impacts associated with the proposed project. Where the acoustical analysis determines that noise levels would exceed applicable City noise standards, noise reduction measures shall be identified and included in the project.

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.6.2 A vibration assessment shall be prepared for construction projects that would involve the use of major vibration-generating equipment (e.g., pile drivers, vibratory rollers) within 200 feet of existing structures. Measures to reduce ground vibration levels shall be identified for any potential vibration impacts exceeding a vibration threshold of 0.2 in/sec ppv.

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.6.3 A construction-related noise mitigation plan shall be submitted to the City for review and approval prior to issuance of a grading permit. The plan shall depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of the project.

Timing/Implementation: Prior to issuance of grading permit

Enforcement/Monitoring: City of Eastvale Planning Department

3.6 NOISE

MM 3.6.4 The following mitigation measures shall be implemented and specified on all project construction plans:

- a) Clearing and construction activities shall be conducted outside of 6:00 p.m. and 6:00 a.m. during the months of June through September, and outside of 6:00 p.m. and 7:00 a.m. during the months of October through May. (Municipal Code Chapter 8.52, Noise Regulation).
- b) All construction equipment shall be kept properly tuned and use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- c) Construction equipment staging areas shall be centrally located on the project site or located at the farthest distance possible from nearby residential land uses.
- d) All motorized construction equipment and vehicles shall be turned off when not in use.

Timing/Implementation: During construction activities, noted on all project construction plans

Enforcement/Monitoring: City of Eastvale Planning Department

3.6.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Exposure of persons to or generation of noise levels in excess of standards established in the City of Eastvale General Plan Noise Element or the City of Eastvale Noise Ordinance.	Less Than Significant with Mitigation
2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	Less Than Significant with Mitigation
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	<u>Non-Transportation-Related Noise</u> Less Than Significant with Mitigation <u>Transportation-Related Noise</u> Significant and Unavoidable
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	Less Than Significant with Mitigation
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, exposure of people residing or working in the area to excessive noise levels.	No Impact
6) For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.	No Impact
7) Result in a substantial contribution to cumulative noise impacts.	Cumulatively Considerable and Significant and Unavoidable

3.6.4 METHODOLOGY

Noise impacts were assessed based on representative noise levels for potential land uses within the Master Plan area. Because the specific mix of land uses that could be developed in the Master Plan area will not be fully defined until Stages 2 and 3 of the Staged Development Process identified in the Master Plan, the impact assessment assumes that noise generated from future development would have the potential to exceed City standards and increase noise levels in the area. The final level of significance for each impact was determined by the potential for noise standards and policies in the City of Eastvale General Plan Noise Element and the City of Eastvale Noise Ordinance (Municipal Code Chapter 8.52, Noise Regulation), as well as any required mitigation, to ensure the impact of future development would be reduced.

3.6.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.6.1 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, as well as noise levels in excess of standards established in the City of Eastvale General Plan Noise Element or the City of Eastvale Noise Ordinance. This impact is **potentially significant**. (Thresholds 1 and 3)

Although the proposed Master Plan does not include specific development proposals, it does facilitate the future development of commercial, residential, and recreational uses in the Master Plan area. As discussed in Subsection 2.2, Regulatory Framework, the City of Eastvale General Plan specifies a range of acceptable noise levels for various land uses. A stationary source that exposes sensitive receptors to noise levels exceeding these standards may be significant if not reduced through regulatory compliance or mitigation measures.

Potential noise increases associated with the each of the potential land uses in the proposed project are discussed below.

Residential Land Uses

The proposed project allows for the future development of various residential land uses including medium- and high-density residential development and mixed-use development, which could incorporate residential development. Noise from proposed residential dwellings would expose other nearby residences (both existing and project-related on-site) to minor increases in ambient noise levels. Noise typically associated with such development includes motors, appliances, air conditioners, lawn and garden equipment, power tools, and generators. Activities associated with residential land uses would result in only minor increases in ambient noise levels, primarily during the day and evening hours and less frequently at night, as perceived at the closest residential receptors.

Parks, Trails, and Open Space Land Uses

The proposed project allows for the development of community features including gathering places, parks, open spaces, and trails. The specific type, quantity, and location of these uses within the Master Plan area have not yet been determined; however, these land uses could potentially include children's play areas, outdoor performance events, and/or vehicle parking areas. Noise levels generated by these park and recreation-related uses are typically sporadic

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and limited primarily to the daytime hours of operation. Parks are typically considered to be an accepted land use in residential developments and generally do not result in noise events that are uncharacteristic of typical residential noise environments. Therefore, similar to activities associated with residential land uses, any park and recreation-related land uses in the Master Plan area would result in only minor increases in ambient noise levels at the closest residential receptors.

Commercial, Hotel, and Civic Land Uses

The proposed project allows for the future development of various nonresidential land uses, including standard and mixed-use retail in a “lifestyle center” format, a “big-box” retail use, and commercial office, hotel, and civic center uses. The specific type, quantity, and location of these uses within have not yet been determined; therefore, potential sources of noise associated with these types of land uses could vary substantially. Noise sources associated with commercial uses can include parking lot activities (e.g., opening and closing of vehicle doors, people talking) and noise generated by mechanical building equipment (e.g., heating, ventilation, and air conditioning [HVAC] systems). Some commercial uses may also result in noise associated with on-site truck operations, vehicle/equipment backup alarms, decompression of trailer truck brakes, operation of stationary and portable equipment (e.g., generators, chillers, air compressors, trash compactors, pneumatic tools, etc.), and loading dock operations (e.g., use of forklifts, hydraulic lifts, and material handling activities).

Operational noise levels for commercial land uses can vary and may include operations during the more noise-sensitive nighttime hours. For commercial uses involving loading dock activities, average hourly noise levels can range from less than 50 to approximately 60 dBA L_{eq} at 50 feet. Exterior landscape and parking lot maintenance activities, as well as solid waste collection activities, can generate average hourly noise levels of approximately 60 dBA L_{eq} at 50 feet. Stationary and portable equipment can generate noise levels of up to 90 dBA L_{eq} at 50 feet. Intermittent noise levels, such as those generated by landscape and parking lot maintenance equipment (i.e., leaf blowers) and vehicle backup alarms, can generate intermittent noise levels of approximately 80 to 120 dBA L_{max} at roughly 3 feet. Actual noise levels will vary depending on the operational characteristics of future projects and site designs.

Impact Summary

The proposed Master Plan includes a mix of land uses, including commercial, residential, and recreational uses as discussed above. Depending on the specific land uses developed, equipment used, and site design, non-transportation noise generated by this development would permanently increase ambient noise levels in the project vicinity and could generate noise levels in excess of standards established in the City of Eastvale General Plan Noise Element and/or the City of Eastvale Noise Ordinance (see Subsection 2.2, Regulatory Framework). In most cases, new development can be designed to include the necessary mitigation or attenuation features necessary to ensure internal and external noise levels meet applicable standards. All future development projects proposed within the Master Plan area would be subject to the policies in the City of Eastvale General Plan Noise Element intended to reduce noise exposure, including:

- Using natural barriers such as berms, setbacks, and/or dense vegetation to assist in noise reduction. (Policy N-25)
- Requiring separation of noise-sensitive buildings from noise-generating sources, use of natural topography and intervening structures to shield noise-sensitive land uses, and

adequate soundproofing of noise sources or receptor structures to maintain desired interior noise levels. (Policy N-27)

- Requiring that commercial and residential mixed-use structures minimize the transfer or transmission of noise and vibration from the commercial land use to the residential land use through appropriate building technologies. (Policy N-28)

In addition, implementation of mitigation measure **MM 3.6.1** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be required to prepare a focused acoustical assessment demonstrating project compliance with interior and exterior noise standards and policies in the City of Eastvale General Plan Noise Element and the City of Eastvale Noise Ordinance (Municipal Code Chapter 8.52, Noise Regulation). Therefore, this impact would be reduced to a **less than significant** level.

Threshold Discussion 3.6.2 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan would expose persons to or generate excessive groundborne vibration. This impact would be **potentially significant**. (Threshold 2)

Future development associated with the project as previously described would not be anticipated to involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. Increases in groundborne vibration levels attributable to the project would be primarily associated with short-term construction-related activities facilitated by the Leal Master Plan.

Groundborne vibration levels associated with typical construction equipment that could be used within the Master Plan area are summarized in **Table 3.6-1**. Based on the levels shown, construction activities often associated with development projects that do not require the use of pile drivers would typically generate ground vibration levels of approximately 0.09 inches per second peak particle velocity (in/sec ppv), or less, at 25 feet.

**TABLE 3.6-1
REPRESENTATIVE CONSTRUCTION EQUIPMENT VIBRATION LEVELS**

Equipment		Peak Particle Velocity at 25 Feet (in/sec)
Pile Driver (Impact)	Upper Range	1.518
	Typical	0.644
Pile Driver (Sonic)	Upper Range	0.734
	Typical	0.170
Vibratory Roller		0.210
Hoe Ram		0.089
Caisson Drill		0.089
Large Bulldozers		0.089
Loaded Trucks		0.076
Jackhammer		0.035
Small Bulldozers		0.003

Source: FTA 2006; Caltrans 2004

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For most construction projects, groundborne vibration levels would not pose a significant risk to nearby structures or occupants. However, the construction of some facilities may require the use of pile drivers. In addition, road improvement projects often require the use of vibratory rollers, which when operated close to existing structures can result in increased levels of annoyance. As depicted in **Table 3.6-2**, ground vibration levels associated with pile drivers can reach levels of approximately 1.52 in/sec ppv at 25 feet. Vibratory rollers can generate ground vibration levels of approximately 0.21 in/sec ppv at 25 feet.

Distance to the projected 0.2 in/sec ppv contour for construction equipment is summarized in **Table 3.6-2**. As depicted, the use of pile drivers can generate ground vibration levels of 0.2 in/sec ppv at distances up to approximately 200 feet. Depending on the siting of future development and the distance to nearby existing structures, the more vibration-intensive construction activities (e.g., pile driving, vibratory rollers) could potentially exceed the criterion of 0.2 in/sec ppv at nearby structures. Such activities may therefore pose a potentially significant impact to nearby structures and increased levels of annoyance to building occupants.

TABLE 3.6-2
DISTANCE TO POTENTIAL IMPACT CONTOUR FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 Feet (in/sec) ¹	Distance to Vibration Impact Contour (0.2 in/sec ppv, feet) ^{2, 3}
Pile Driver (Impact)	0.644–1.518	94–200
Pile Driver (Sonic)	0.170–0.734	28–105
Vibratory Roller	0.210	33
Other Equipment ⁴	0.089	15

Source: FTA 2006; Caltrans 2004

1. Does not include the simultaneous operation of multiple pieces of equipment.
2. Based on a vibration threshold of 0.2 in/sec ppv, which is typically considered sufficient to protect against structural damage (excluding fragile and historic structures). This same threshold also represents the level at which vibrations would be potentially annoying to people in buildings (Caltrans 2002, 2004). Does not include vibration-sensitive exterior activities.
3. Based on conservative ground attenuation rates. Actual levels/contour distances may vary depending on equipment selected and site conditions.
4. Includes hoe rams, bulldozers, tractors, front-end loaders, caisson drills, loaded trucks, and jackhammers.

Implementation of mitigation measure **MM 3.6.2** as included in the Mitigation Program for the Leal Master Plan requires that all subsequent development plans and/or projects which would involve the use of major vibration-generating equipment (e.g., pile drivers, vibratory rollers) within 200 feet of existing structures prepare a vibration impact assessment identifying measures to reduce short-term construction vibration impacts. Various measures commonly employed to reduce short-term vibration levels, such as the use of alternative construction techniques, can significantly reduce groundborne vibration levels. Therefore, this impact would be reduced to a **less than significant** level.

Threshold Discussion 3.6.3

The project would be considered to have a significant impact if traffic generated by future development under the proposed Master Plan would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This is a **potentially significant** impact. (Threshold 3)

The City's General Plan provides information on projected noise levels along major roadways in the city—specifically, what the future noise level could be at a given distance from the centerline of the roadway. This information is intended to ensure that noise impacts are properly addressed when new development proposals are reviewed. The noise information is expressed in A-weighted decibels (dBA) and divided into bands or contours ranging from 55 to 70 dBA in 5 dBA increments and based on roadway classification (urban arterial four lanes, urban arterial six lanes, major freeway, etc.). As discussed in Section 3.2, Transportation and Traffic, of this EIR, the addition of traffic from future development of the project area to area roadways would contribute to the need for segments of Limonite Avenue, Hamner Avenue, and Cantu-Galleano Ranch Road to be widened from four to six lanes. This predicted increase in traffic volumes would also contribute to increases in traffic noise levels. **Table 3.6-3** shows the General Plan's projected noise level contours along these major roadways based on their current classifications (urban arterial four lanes) and after widening of the roadways (urban arterial six lanes).

**TABLE 3.6-3
PREDICTED INCREASES IN TRAFFIC NOISE LEVELS –
EXISTING AND EXISTING PLUS PROJECT CONDITIONS**

Roadway Classification	70 dBA	65 dBA	60 dBA	55 dBA
Urban Arterial – Four Lanes	106	227	487	1,048
Urban Arterial – Six Lanes	141	297	638	1,373

Source: Eastvale 2012

As shown, the ambient noise levels would increase for land uses adjacent to these roadways after they are widened. In addition, project traffic would contribute to the need for additional freeway capacity on Interstate 15 (I-15) and as such would contribute to increased freeway noise. The City does not have any standards related to transportation-related noise; however, the project would result in a permanent increase in transportation-related noise levels in the Master Plan area's vicinity above levels existing without the project. As discussed under Impact 3.6.1, future development projects within the Master Plan area would be designed and constructed consistent with policies in the City of Eastvale General Plan Noise Element intended to reduce noise exposure and would be required to prepare a focused acoustical assessment to demonstrate project compliance with interior and exterior noise standards and policies in the City of Eastvale General Plan Noise Element and Noise Ordinance (mitigation measure **MM 3.6.1**). However, these measures would not address traffic noise levels affecting existing land uses in the vicinity of project area roadways.

General Plan Policy N-18 requires that natural buffers, setbacks, or other noise attenuation be established between freeways and urban arterial roadways and adjoining noise-sensitive areas and that noise mitigation practices be employed when designing all future streets and highways and when improvements occur along existing highway segments. All roadway improvements implemented in Eastvale and by the City would be required to comply with this policy. However, as discussed in Section 3.2, Transportation and Traffic, of this EIR, some of the roadway segments affected by the proposed project are not in Eastvale and would have improvements planned and implemented at a regional level. In these cases, noise mitigation practices/design cannot be guaranteed. Furthermore, it is possible that full mitigation of transportation-related noise impacts on existing uses in the city would be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. Therefore, this impact would remain **significant and unavoidable**.

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Threshold Discussion 3.6.4 The project would be considered to have a significant impact if future development facilitated by the proposed Master Plan would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity. This impact is considered **potentially significant**. (Threshold 4)

As discussed under Impact 3.6.1 above, implementation of Stages 2 and 3 of the Staged Development Process identified in the Leal Master Plan would facilitate the future development of commercial, office, hotel, civic, and residential uses within the Master Plan area. During construction activities, ambient noise levels would likely increase and be noticeable to nearby residential land uses. Additionally, depending on project phasing and timing, if on-site residential uses were constructed and occupied during construction activities, those uses could be exposed to increased noise levels resulting from construction activities.

Construction noise associated with future development would be temporary and would vary depending on the nature of the construction activities being performed. Noise generated during construction is typically associated with the operation of off-road equipment, including excavation equipment, material handlers, and portable generators. **Table 3.6-4** lists typical uncontrolled noise levels generated by individual pieces of representative construction equipment likely to be used during construction.

**TABLE 3.6-4
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS**

Equipment	Typical Noise Level (dBA) at 50 Feet from Source	
	L _{max}	L _{eq}
Air Compressor	80	76
Backhoe/Front End Loader	80	76
Compactor (Ground)	80	73
Concrete Mixer Truck	85	81
Concrete Mixer (Vibratory)	80	73
Concrete Pump Truck	82	75
Concrete Saw	90	83
Crane	85	77
Dozer/Grader/Excavator/Scraper	85	81
Drill Rig Truck	84	77
Generator	82	79
Gradall	85	81
Hydraulic Break Ram	90	80
Jackhammer	85	78
Impact Hammer/Hoe Ram (Mounted)	90	83
Pavement Scarifier/Roller	85	78
Paver	85	82

Equipment	Typical Noise Level (dBA) at 50 Feet from Source	
	Pile Driver (Impact Type)	101
Pneumatic Tools	85	82
Pumps	77	74
Truck (Dump/Flat Bed)	84	80

Source: FHWA 2006

As shown, noise levels associated with individual construction equipment used for typical construction projects can reach levels exceeding 90 dBA L_{max} . This would be a substantial temporary increase in ambient noise levels.

The City's General Plan includes policies intended to ensure that construction activities are regulated in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas (Policies N-22, N-23, and N-24). Pursuant to those requirements, mitigation measure **MM 3.6.3** as included in the Leal Master Plan Mitigation Program requires that all subsequent development plans and/or projects within the Master Plan area submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan is required to depict the location of construction equipment and specify how the noise from the equipment will be mitigated during construction. In addition, mitigation measure **MM 3.6.4** specifies conditions to be added to every construction plan, including limiting the hours of construction activities to those outside of the more noise-sensitive evening and nighttime hours.

Implementation of mitigation measures **MM 3.6.3** and **MM 3.6.4** would substantially reduce construction noise levels. For instance, the use of mufflers and engine shrouds would reduce equipment noise levels by approximately 10 dB or more. In addition, hourly limitations on construction activities would significantly reduce the potential for annoyance and sleep disruption for occupants of nearby residential uses. Therefore, this impact would be reduced to a **less than significant** level.

Threshold Discussion 3.6.5 The project would be considered to have a significant impact future development anticipated as a result of the proposed project would result in the exposure of people residing or working in the area to excessive noise levels from airports or private airstrips. **No impact** would occur. (Thresholds 5 and 6)

Although aircraft flyovers are audible in Eastvale as a result of aircraft approaching and departing from Chino Airport, the most recently adopted version of the Riverside County Airport Land Use Compatibility Plan (ALUCP) for Chino Airport (2008) shows the project site as being outside the Airport Influence Area Boundary for Chino Airport. In addition, the Master Plan area is not in the vicinity of a private airstrip.

Furthermore, the City's General Plan states that airport noise is transient and not considered a major noise source unless occurring during the late evening and morning hours. According to the 2008 ALUCP, only about 10 percent of flights at Chino Airport occur between 7:00 p.m. and 7:00 a.m. Helicopters and heliports are also potential sources of noise, but due to the relatively low frequency and short duration of their operation in most circumstances, these operations do not significantly affect average noise levels in Eastvale. Therefore, future development

3.6 NOISE

facilitated by the project would not result in the exposure of people residing or working in the area to excessive noise levels from airports or private airstrips. **No impact** would occur.

3.6.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.6.6 The project would be considered to have a cumulatively considerable impact if, under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. This is a **cumulatively considerable** impact. (Threshold 7)

The geographic extent of the cumulative setting for noise consists of the Master Plan area and the surrounding areas in the city. Cumulative development conditions would result in increased cumulative roadway noise levels and would also result in increased noise associated with future development. As noted earlier, all future development projects proposed within the Master Plan area would be subject to the policies in the City of Eastvale General Plan Noise Element intended to reduce noise exposure. Implementation of mitigation measure **MM 3.6.1** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be required to prepare a focused acoustical assessment demonstrating project compliance with interior and exterior noise standards and policies in the General Plan Noise Element and the Noise Ordinance (Municipal Code Chapter 8.52 Noise Regulation). Therefore, the primary factor for cumulative impact analysis is the consideration of future transportation-related noise levels.

As discussed under Impact 3.6.2 above, the addition of traffic from future development of the Master Plan area to area roadways would result in a significant increase in traffic noise levels at existing land uses in the area. Under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. Although predicted increases in traffic noise levels for future cumulative conditions would also be attributable to projected increases in development in the surrounding community, the project's contribution to future cumulative traffic noise levels along area roadway segments would still be considered significant. As previously discussed, full mitigation of transportation-related noise impacts on existing uses could be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. For example, commonly employed traffic noise mitigation measures, such as sound barriers, may not be feasible at some land uses, particularly existing residential land uses that front major roadways. As a result, this impact is considered **cumulatively considerable** and **significant and unavoidable**.

REFERENCES

Caltrans (California Department of Transportation). 2002. *Transportation Related Earthborne Vibrations*.

———. 2004. *Transportation and Construction-Induced Vibration Guidance Manual*.

Eastvale, City of. 2012. *City of Eastvale General Plan*.

FHWA (US Department of Transportation, Federal Highway Administration). 2006. *Construction Noise Handbook*.

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*.

RCALUC (Riverside County Airport Land Use Commission). 2008. *Riverside County Airport Land Use Compatibility Plan* (Chapter 3, Individual Airport Policies and Compatibility Maps).

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3.7.1 OVERVIEW

This section concludes that although there are no previously recorded sensitive biological resources within the Leal Master Plan area, site-specific surveys have not been conducted to confirm the absence of such resources. Therefore, future development anticipated as a result of the project could adversely affect or damage potential or unknown biological resources on the project site and contribute to the cumulative disturbance and/or loss of these resources in the cumulative setting. However, implementation of the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) and adherence to additional mitigation measures included in the Leal Master Plan Mitigation Program would ensure future development adequately mitigates adverse impacts and would reduce all impacts on potential/unidentified biological resources to a less than significant level.

3.7.2 MITIGATION MEASURES

Per the requirements of the MSHCP, the following mitigation measures are required to be implemented by all subsequent development plans and/or projects within the Leal Master Plan. References to these requirements, conditions, and measures must be included in construction specifications.

Western Riverside MSHCP Standards and Conditions

Note: The following discussion highlights the requirements of the MSHCP as they apply to the proposed project. Because the MSHCP has been adopted by the City, it is not necessary to adopt a mitigation measure to enforce its provisions.

The MSHCP requires that projects pay a mitigation fee, perform species-specific habitat assessments and surveys, and be reviewed for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plant Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines Pertaining to the Urban/Wildlands Interface of the MSHCP.

The following requirements of the MSHCP apply to the proposed project and will be required of all subsequent development plans and/or projects within the Leal Master Plan area:

- A. The project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code).
- B. The project applicant shall assess the proposed project's consistency with Section 6.1.2, Section 6.1.3, Section 6.3.2, and Section 6.1.4 of the MSHCP.
- C. A qualified biologist shall conduct a burrowing owl habitat assessment. If needed, focused surveys and preconstruction surveys shall be conducted, as well as appropriate avoidance and minimization (Section 6.3.2 of the MSHCP).
- D. A qualified biologist shall conduct habitat assessments for the required Narrow Endemic Plant Species. If needed, focused surveys and shall be conducted, as well as appropriate avoidance and minimization (Section 6.1.3 of the MSHCP).
- E. A qualified biologist shall conduct a habitat assessment for Delhi sands flower-loving fly in areas underlain by Delhi soil series (Species-specific Objective 1B).

3.7 BIOLOGICAL RESOURCES

As noted above, because the City has adopted the MSHCP and enforces its provisions, these requirements do not need to be included as mitigation measures.

Project-Specific Mitigation Measures

The following mitigation measures are not included in the MSHCP and are specific to the proposed project. The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been “discharged” or “completed” with physical changes completed by a prior project/plan).

MM 3.7.1 All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusion zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.

Timing/Implementation: Requirements shall be incorporated into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.7.2 Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the City for its records.

Timing/Implementation: Prior to approval of grading permits

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.7.3 Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit.

Timing/Implementation: Prior to approval of grading permits

Enforcement/Monitoring: City of Eastvale Planning Department

3.7.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.	Less Than Significant with Mitigation
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.	Less Than Significant with Mitigation
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less Than Significant with Mitigation
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less Than Significant
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No Impact
6) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	Less Than Significant
7) Reduce the number or restrict the range of an endangered, rare, or threatened plant or animal species or biotic community, thereby causing the species or community to drop below self-sustaining levels.	Less Than Significant with Mitigation
8) Cumulative impacts to biological resources.	Less Than Cumulatively Considerable with Mitigation

3.7 BIOLOGICAL RESOURCES

3.7.4 METHODOLOGY

Several steps were taken to characterize the biological setting in the project vicinity.

First, project-related documentation was reviewed to collect site-specific data regarding habitat suitability for special-status species, as well as the identification of potentially jurisdictional waters. Second, information was obtained from a variety of outside data sources and can be found in the reference list. Finally, preliminary database searches were performed on the following websites to identify special-status species with the potential to occur in the area:

- US Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) System (2015a)
- USFWS Critical Habitat Portal (2015b)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (2015)
- California Native Plant Society (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (2015)
- Riverside County Integrated Project (RCIP) Conservation Summary Report Generator (2015)
- Riverside County Parcel Report (2015)

The USFWS IPaC System was queried to identify special-status species within USFWS jurisdiction that have the potential to occur in the project study area. In addition, the USFWS Critical Habitat Portal was queried to identify designated critical habitat within 1 mile of the project site.

A query of the CNDDDB was conducted to identify mapped and unmapped occurrences for special-status species in the Corona North, California, US Geological Survey (USGS) 7.5-minute quadrangle and the eight adjacent quadrangles (Corona South, Black Star Canyon, Prado Dam, Riverside West, Lake Mathews, Fontana, Guasti, and Ontario).

The CNPS database was queried to identify special-status plant species with the potential to occur in the aforementioned quadrangles. Raw data from the database queries is provided in **Appendix 3.7**.

The RCIP Conservation Summary Report Generator and Riverside County Parcel Report were queried to determine if the project site is in mitigation fee areas and MSHCP special survey areas. The project site is located in the MSHCP Mitigation Fee Area (Riverside County Ordinance 810.2), as well as the Burrowing Owl Survey Area (Figure 6-4 in the MSHCP) and the Narrow Endemic Plant Survey Area (Figure 6-1 in the MSHCP). These reports are provided in **Appendix 3.7**.

3.7.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.7.1 Future development anticipated as a result of the proposed project could result in substantial adverse effects, either directly or through habitat modifications, to special-status species, which would be considered a **potentially significant** impact. (Thresholds 1 and 7)

There are no previously recorded sensitive biological resources (i.e., special-status species populations, sensitive habitats, or jurisdictional features) within the project area. However, the project area has not yet been formally evaluated for these resources; it is unknown whether biological resources are present.

Although the proposed Master Plan does not include specific development proposals, it does facilitate the future development of commercial, office, hotel, civic, and residential uses on land currently primarily devoted to dairy/agricultural and residential uses. Implementation of Stages 2 and 3 of the Staged Development Process, identified in the Leal Master Plan [which would include both detailed plans for the first phase(s) of development (land use, circulation, and infrastructure plans) and specific development proposals], would lead to ground-disturbing activities that could result in impacts to biological resources within the project area. This impact is potentially significant, but as discussed below can be reduced to less than significant through the implementation of mitigation measures.

Implementation of the MSHCP at the project-specific level would minimize direct and indirect impacts from future projects proposed in accordance with the Leal Master Plan. Payment of the mitigation fee and compliance with all applicable requirements of the MSHCP provide full mitigation under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the California Endangered Species Act (CESA) for impacts to MSHCP covered species and habitats. The MSHCP also addresses indirect impacts through cores and linkages, criteria cells, and plan fees.

The Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (State Clearinghouse No. 2001101108, CEQ Number 020463, ERP Number SFW-K99032-CA) prepared for the MSHCP was a project-specific EIR/EIS and found that with a combination of impact reduction features incorporated into the MSHCP, including reserve configuration, adaptive management and monitoring, and species survey and avoidance/minimization policies, development consistent with the MSHCP would have less than significant impacts to covered species.

Suitable habitat for burrowing owl, white-tailed kite, grasshopper sparrow, and mountain plover, and potentially for rare plants, exists within the Master Plan area. All of these plant and animal species are covered under the MSHCP. Project compliance with the MSHCP fully mitigates impacts for these covered species; however, additional surveys/assessments are required for certain species including burrowing owl, narrow endemic plant species, and, where appropriate, Delhi sands flower-loving fly (see MSHCP conditions listed in Subsection 3.7.2).

The project site may provide nesting, foraging, and/or wintering habitat for special-status Oregon vesper sparrow as well as other migratory birds and raptors not identified this analysis. All native birds (except game birds during the hunting season and exotic birds), regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA) from “take” of individuals and active nests. Vegetation clearing, construction noise, and other human activity near active nesting sites could result in direct impacts to nesting birds such as nest abandonment and direct mortality. Due to the presence of suitable habitat for these species, implementation of project-related activities may result in adverse impacts to nesting birds. Mitigation measure **MM 3.7.1** requires establishment of exclusionary zones around active nest sites and minimizes construction-related impacts to nesting birds to a less than significant level.

Implementation of the MSHCP and adherence to mitigation measure **MM 3.7.1** would ensure that future development plans and/or projects would not adversely affect biological resources. Therefore, impacts would be reduced to **less than significant**.

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Threshold Discussion 3.7.2 Future development anticipated as a result of the proposed Leal Master Plan could result in impacts to sensitive biological communities, including riparian habitat and jurisdictional wetlands. This would be a **potentially significant** impact. (Thresholds 2 and 3)

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under the MSHCP, CEQA, Section 1600 of the California Fish and Game Code, and Section 404 of the Clean Water Act. Detailed biological field investigations have yet to be conducted in the project area. Thus, the presence and extent of sensitive habitats and/or jurisdictional water features is currently unknown and will be determined by a qualified biologist on a project-by-project basis.

As discussed under Threshold Discussion 3.7.1 above, implementation of Stages 2 and 3 of the Staged Development Process identified in the Leal Master Plan would lead to ground-disturbing activities. As a result, project grading may result in impacts to sensitive habitats including jurisdictional water features should they be present. Implementation of the MSHCP and adherence to mitigation measures **MM 3.7.2** and **MM 3.7.3** would ensure that future development plans and/or projects would not adversely affect sensitive habitats or jurisdictional features by requiring no net loss of wetlands through avoidance and minimization and/or compensatory mitigation. Therefore, impacts would be reduced to a **less than significant** level.

Threshold Discussion 3.7.3 Future development anticipated as a result of the proposed project is unlikely to interfere with the movement of native resident or migratory fish or wildlife species. This would be a **less than significant** impact. (Threshold 4)

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Corridors are present in a variety of habitats and link otherwise fragmented acres of undisturbed area.

Maintaining the continuity of established wildlife corridors is important to sustain species with specific foraging requirements, preserve a species' distribution potential, and retain diversity among many wildlife populations. Therefore, resource agencies consider wildlife corridors to be a sensitive resource.

Irrigation channels and agricultural land may provide enough cover to function as a migratory corridor for some species; however, the entire project site has been disturbed by development and intense agricultural uses and is unlikely to facilitate local wildlife movement. In addition, the project site is completely surrounded by dense urban development, further impairing wildlife movement.

The MSHCP Conservation Area comprises a variety of existing and proposed "cores" and "linkages."

- A core is defined in the MSHCP as a block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more covered species.
- A linkage is defined by the MSHCP as a connection between core areas with adequate size, configuration, and vegetation characteristics to provide for live-in habitat or genetic flow for planning species.

- A constrained linkage is defined as a constricted connection expected to provide for movement of identified planning species between core areas, where options for assembly of the connection are limited due to existing patterns of use.

The project site does not overlap with any MSHCP-designated linkages (see Figure 3-2 in the MSHCP). The project site does not function as a significant wildlife corridor, and any impacts to wildlife movement would be considered **less than significant**.

Threshold Discussion 3.7.4 Implementation of the proposed Master Plan would not conflict with any local policies or ordinances protecting biological resources. There would be **no impact**. (Threshold 5)

The City of Eastvale has no policies or ordinances relating to biological resources. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, including the City of Eastvale General Plan. As such, **no impact** is anticipated.

Threshold Discussion 3.7.5 Future development anticipated as a result of the proposed Master Plan could conflict with the provisions of the Western Riverside County MSHCP. This would be considered a **less than significant** impact. (Threshold 6)

The MSHCP is a habitat conservation plan and natural community conservation plan to which the City of Eastvale is a permittee (i.e., signatory). The MSHCP protects and preserves certain habitats and species in the region.

The MSHCP delineates particular areas of concern through the identification of specific areas known as Criteria Cells. Criteria Cells typically contain certain restrictions on development and land alterations. The project site is not located within a Criteria Cell. Since the site is not located within a Criteria Cell, there are no special conservation requirements on the property. The project site is, however, still subject to be reviewed for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plant Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines Pertaining to the Urban/Wildlands Interface of the MSHCP.

Future development applicants will be required to demonstrate their project’s consistency with the MSHCP.

The proposed Master Plan area is located in the Burrowing Owl Survey Area (see **Appendix 3.7** for Summary Report). In addition, the proposed project is located within the Narrow Endemic Plant Survey Area for the following species: San Diego ambrosia, Brand’s phacelia, and San Miguel savory (see **Appendix 3.7** for Summary Report).

Future project applicants will be required to conduct habitat assessments for burrowing owls and the plant species listed above. If potential habitat for these species is determined to be located on the property, focused surveys will be required during the appropriate season, and avoidance and minimization measures may need to be implemented in accordance with the MSHCP requirements.

A final component of the MSHCP is Mitigation Fee Areas, which are land areas that occur within the MSHCP and require a fee for development activities to occur. These fees are utilized to fund the minimization to certain special-status species and habitats. The project site is within a Mitigation Fee Area. Future development projects will be required to pay these fees to comply

3.7 BIOLOGICAL RESOURCES

with the overlying habitat conservation plan (the MSHCP). With adherence to the standard conditions and requirements, any impacts will be **less than significant** and the project will have no conflict with the MSHCP.

3.7.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.7.6 Future development anticipated as a result of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the immediate area of the Master Plan area, will result in the conversion of habitat and impact biological resources. This impact is considered **potentially cumulatively considerable**. (Threshold 8)

The City, along with other jurisdictions in western Riverside County, participates in the MSHCP, which is designed to protect over 150 species and conserve over 500,000 acres in western Riverside County. Project compliance with the MSHCP fully mitigates for impacts on covered species and ensures large segments of natural communities in western Riverside County will be preserved.

Adherence to the standards and conditions of the MSHCP, and implementation of mitigation measure **MM 3.7.1**, ensures that impacts to special-status species and their habitats are minimized. Finally, implementation of mitigation measures **MM 3.7.2** and **MM 3.7.3** will ensure impacts to jurisdictional features are minimized.

Though future development resulting from the proposed Leal Master Plan will continue the urbanization of the area, participation in and implementation of the MSHCP will effectively reduce the project's contribution to cumulative impacts to **less than cumulatively considerable**.

REFERENCES

- CDFW (California Department of Fish and Wildlife). 2015. California Natural Diversity Database QuickView Tool in BIOS 5. Sacramento: CDFW Biogeographic Data Branch.
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- County of Riverside. 2015. Riverside County Parcel Report. http://mmc.rivcoit.org/MMC_Public/Viewer.html?Viewer=MMC_Public.
- RCA (Riverside Conservation Authority). 2004. *Multiple Species Habitat Conservation Plan*.
- RCIP (Riverside County Integrated Project). 2015. Conservation Summary Report Generator. http://www.rctlma.org/online/content/rcip_report_generator.aspx.
- USFWS (US Fish and Wildlife Service). 2015a. Information, Planning, and Conservation (IPaC) System. <http://ecos.fws.gov/ipac/>.
- . 2015b. Critical Habitat Portal. criticalhabitat.fws.gov/.

3.7 BIOLOGICAL RESOURCES

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3.8.1 OVERVIEW

This section concludes that while there are currently no known significant cultural or paleontological resources within the Leal Master Plan area, site-specific surveys have not been conducted to confirm the absence of such resources. Therefore, future development anticipated as a result of the project could adversely affect or damage potential or unknown cultural and paleontological resources in the Master Plan area and contribute to the cumulative disturbance or loss of these resources in the cumulative setting. However, adherence to mitigation measures included in the Leal Master Plan Mitigation Program would ensure future development adequately mitigates adverse impacts and would reduce all impacts on potential/unidentified cultural and paleontological resources to a less than significant level.

3.8.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been "discharged" or "completed" with physical changes completed by a prior project/plan).

MM 3.8.1 A detailed cultural resources field survey of the subject property shall be conducted prior to approval of the project. The cultural resources field survey shall identify any cultural resource finds and will set out measures to mitigate any impacts to any significant resources as defined by CEQA, the California Register of Historical Resources, and/or the National Historic Preservation Act. Mitigation methods to be employed include but are not limited to the following:

- Redesign of the development project to avoid the resource. The resource site shall be deeded to the City or a nonprofit agency to be approved by the City for maintenance of the site.
- If avoidance is determined to be infeasible by the City, the resource shall be mapped, stabilized, and capped pursuant to appropriate standards.
- If capping is determined to be infeasible by the City, the resource shall be excavated and recorded to appropriate standards.

Timing/Implementation: Prior to approval of development plan or project

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.8.2 If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery.

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The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of cultural resources.

Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.8.3

If human remains are discovered during any ground-disturbing activities in the project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities

Enforcement/Monitoring: City of Eastvale Planning Department

MM 3.8.4

If any paleontological resources (fossils) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Department shall be immediately notified. At that time, the City will coordinate any necessary investigation of the discovery with a qualified paleontologist.

The City shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontological resources. The City and the project applicant shall consult and agree on implementation of a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of paleontological resources.

Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities

Enforcement/Monitoring: City of Eastvale Planning Department

3.8.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Cause a substantial adverse change in the significance of an archaeological resource or an historical resource as defined in Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5, respectively.	Less Than Significant with Mitigation
2) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.	Less Than Significant with Mitigation
3) Disturb any human remains, including those interred outside of formal cemeteries.	Less Than Significant with Mitigation
4) Contribute to the cumulative disturbance of cultural resources (i.e., prehistoric sites, historic sites, historic buildings/structures, and isolated artifacts and features) and human remains.	Less Than Cumulatively Considerable with Mitigation
5) Contribute to the cumulative disturbance of paleontological resources (i.e., fossils and fossil formations).	Less Than Cumulatively Considerable with Mitigation

3.8.4 METHODOLOGY

The project area has not yet been formally evaluated for cultural resources. As such, evaluation of the potential for cultural and paleontological resources to be affected by the proposed Master Plan was based primarily on the potential for the occurrence of unknown cultural and paleontological resources.

3.8.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.8.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could cause a substantial adverse change in the significance of an archaeological resource or an historical resource or disturb any human remains. This would be a **potentially significant** impact. (Thresholds 1 and 3)

There are no designated or previously identified cultural resources (i.e., prehistoric sites, historic sites, historic buildings/structures, and isolated artifacts) within the Master Plan area. However, the project area has not yet been formally evaluated for these resources; it is unknown whether cultural resources or human remains are present.

Although the proposed Master Plan does not include specific development proposals, it does facilitate the future development of commercial, office, hotel, civic, and residential uses on land currently used primarily for dairy/agricultural uses. Stages 2 and 3 of the Staged Development Process identified in the Leal Master Plan, which would include both detailed plans for the first phase(s) of development (land use, circulation, and infrastructure plans) and specific development proposals, would result in ground-disturbing activities that could result in damage to unevaluated resources or uncover buried cultural resources and/or human remains within the Master Plan area.

3.8 CULTURAL RESOURCES

Mitigation measure **MM 3.8.1** as included in the Leal Master Plan Mitigation Program ensures that future development plans and projects would be required to prepare detailed, site-specific cultural resources field surveys to identify any cultural resource finds and set out measures to mitigate any impacts, including redesign of the project to avoid the resource, stabilization and capping, or excavation and recording.

As discussed in Subsection 2.2, Regulatory Framework, the state California Environmental Quality Act (CEQA) Guidelines (Section 15064.5(e-f)) require the City to make provisions for the accidental discovery of historical or archaeological resources and human remains during construction activities. Pursuant to these requirements, mitigation measure **MM 3.8.2** as included in the Mitigation Program requires that a qualified archaeologist immediately evaluate the discovery of any cultural resources during future construction activities and implement avoidance measures or appropriate mitigation to avoid adverse impacts. In the event that human remains are discovered, mitigation measure **MM 3.8.3** requires that the Riverside County Coroner be notified per California Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5.

Adherence to these mitigation measures as included in the Leal Master Plan Mitigation Program would ensure that future development plans and/or projects would not adversely affect or result in damage to potential or unknown cultural resources. Therefore, impacts would be reduced to a **less than significant** level.

Threshold Discussion 3.8.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geological feature. This would be a **potentially significant** impact. (Threshold 2)

As discussed under Impact 3.8.1 above, Stages 2 and 3 of the Staged Development Process identified in the Leal Master Plan would result in ground-disturbing activities. Because Eastvale is considered to be sensitive for paleontological resources, ground-disturbing activities within the Master Plan area could result in the unanticipated discovery and damage of paleontological resources.

Pursuant to state CEQA Guidelines Section 15064.5(f), mitigation measure **MM 3.8.4** as included in the Leal Master Plan Mitigation Program requires that a qualified paleontologist evaluate any such discovery. If the find is determined to be a unique paleontological resource, implementation of avoidance measures or appropriate mitigation would be required.

Adherence to mitigation measure **MM 3.8.4** would ensure that future development plans and/or projects would not adversely affect or result in damage to potential or unknown paleontological resources. Therefore, impacts would be reduced to a **less than significant** level.

3.8.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.8.3 The project would be considered to have a cumulatively considerable impact if approval of the proposed Master Plan could contribute to the cumulative disturbance of cultural resources. This impact would be **potentially cumulatively considerable**. (Threshold 4)

The cumulative context associated with the proposed Leal Master Plan includes proposed, planned, reasonably foreseeable, and approved projects in Eastvale and surrounding Riverside County. Urban development that has occurred over the past several decades in the county has resulted in adverse impacts on innumerable significant historical and archaeological resources. It is reasonable to assume that present and future development activities will continue to result in impacts on significant cultural resources, including historical resources, archaeological resources, and human remains.

Federal and state laws protect cultural resources in most instances but are not always feasible to protect cultural resources, particularly when in-place preservation would frustrate the implementation of projects. The proposed Master Plan would contribute to potential impacts on cultural and paleontological resources, including archaeological resources associated with Native American activities and historic resources associated with Euro-American settlement, gold mining, agriculture, and economic development. The proposed Master Plan could conflict with these resources through inadvertent destruction or removal resulting from project grading, excavation, and construction activities. For this reason, the cumulative effects of development in the region on cultural resources are considered **potentially cumulatively considerable** without mitigation. Furthermore, although there are currently no known significant cultural resources within the Master Plan area, the area has not yet been surveyed for cultural resources, so it is possible that some resources may be discovered to exist. In addition, ground-disturbing activities associated with construction within the Master Plan area could uncover previously unknown cultural resources and/or human remains, and the potential loss or degradation of these resources might contribute to the cumulative loss of cultural resources in Eastvale and Riverside County. Without mitigation, this contribution could be considerable when combined with other past, present, and foreseeable development in the region.

Adherence to mitigation measures **MM 3.8.1** through **MM 3.8.3** as included in the Leal Master Plan Mitigation Program would ensure that future development plans and/or projects would not adversely affect or result in the damage of potential or unknown cultural resources and would reduce the proposed Master Plan's contribution to cumulative impacts to prehistoric resources, historic resources, and human remains to a **less than cumulatively considerable** level.

Threshold Discussion 3.8.4 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to the cumulative disturbance of paleontological resources (i.e., fossils and fossil formations). This would be a **potentially cumulatively considerable** impact. (Threshold 5)

The Master Plan area has never been studied for the presence of fossils, so it is not known whether these are present on the site. However, Eastvale is considered to be sensitive for paleontological resources. As a result, future ground-disturbing activities within the project area could potentially uncover previously unknown fossil resources that might contribute to the cumulative loss of paleontological resources in Eastvale and Riverside County. Without mitigation, this loss of paleontologic resources could be considerable when combined with other past, present, and foreseeable development in the region.

Adherence to mitigation measure **MM 3.8.4** as included in the Leal Master Plan Mitigation Program would ensure that future development plans and/or projects would not adversely affect or result in the damage of potential or unknown paleontological resources and would reduce the proposed project's contribution to paleontological resources to a **less than cumulatively considerable** level.

3.8 CULTURAL RESOURCES

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3.9.1 OVERVIEW

This section assumes, based on existing site conditions and the absence of a site-specific geotechnical study, that structural damage associated with strong shaking, liquefaction, and subsidence could result. However, the analysis concludes that geological and geotechnical investigations required as part of the environmental and development review process for future development, along with state and local regulatory requirements, would reduce impacts and that future development anticipated as a result of the proposed project would require no mitigation measures to conclude that impacts are less than significant or less than cumulatively considerable.

3.9.2 MITIGATION MEASURES

None required.

3.9.3 THRESHOLDS OF SIGNIFICANCE AND DETERMINATION OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would exceed the following thresholds. The Determination column is a summary of the conclusions of the analysis provided in this section.

Threshold	Determination
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving: <ul style="list-style-type: none"> a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to California Geological Survey (formerly Division of Mines and Geology) Special Publication 42. b) Strong seismic ground shaking. c) Seismic-related ground failure, including liquefaction. d) Landslides. 	<ul style="list-style-type: none"> a) Less Than Significant b) Less Than Significant c) Less Than Significant d) Less Than Significant
2) Result in substantial soil erosion or the loss of topsoil.	Less Than Significant
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Less Than Significant
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Less Than Significant
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	No Impact
6) Convert 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.	Less Than Significant
7) Contribute to cumulative geologic and soils impacts, in combination with existing, approved, proposed, and reasonably foreseeable development in Eastvale.	Less Than Cumulatively Considerable
8) Result in a contribution to the conversion of important farmland, when considered in combination with regional and statewide growth.	Less Than Cumulatively Considerable

3.9 GEOLOGY AND SOILS

Future development in the Master Plan area will connect to the City sewer system. No septic tanks or alternative wastewater disposal systems will be developed as part of the project. Therefore, the capability of soils to support the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (Threshold 5) is not discussed further in this Draft EIR.

3.9.4 METHODOLOGY

The geology and soils analysis is based on a review of published information, surveys, and reports regarding regional geology and soils. Information was obtained from private and governmental agencies and Internet websites, including the Natural Resources Conservation Service (NRCS), the California Geological Survey (CGS), and the US Geological Survey (USGS).

3.9.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.9.1 The potential for the project site to be exposed to hazards associated with fault rupture is considered unlikely. Therefore, this impact is considered **less than significant**. (Threshold 1a)

Southern California, including the project site, is subject to the effects of seismic activity because of the active faults that traverse the region. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone. As discussed in Subsection 2.1, Existing Setting, there are no known active faults in the vicinity of the project site, nor are there any Alquist-Priolo Special Earthquake Study Zones on or near the site. As a result, the potential for fault surface rupture on the site is very unlikely. Although no active faults traverse the project site, all new development and redevelopment would be required to comply with the requirements of the Alquist-Priolo Fault Zoning Act as well as the California Building Standards Code (CBSC), which includes specific design measures intended to maximize structural stability in the event of an earthquake. Additionally, the City of Eastvale codifies the Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 et seq.). Therefore, impacts would be **less than significant**.

Threshold Discussion 3.9.2 The project site is located in an area that may be subject to strong seismic ground shaking. This impact is considered **less than significant**. (Threshold 1b)

Southern California has numerous active seismic faults subjecting people to potential earthquake- and seismic-related hazards. Seismic activity poses two types of potential hazards for people and structures, categorized as either primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Secondary hazards include ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

According to the CGS (2015), the project site is located in a seismically active area and could experience ground shaking associated with an earthquake along the San Andreas and San Jacinto fault zones and the Chino fault, located about 20 miles northeast and 15 miles to the southwest, respectively. The type or severity of seismic hazards affecting the site is mainly dependent on the distance to the causative fault, the intensity of the seismic event, and the soil characteristics. The seismic hazard may be either primary or secondary, as described above.

However, project development would be designed in accordance with CBSC requirements that address structural seismic safety. All new development and redevelopment would be required to comply with the CBSC, which includes design criteria for seismic loading and other geologic hazards, including design criteria for geologically induced loading that govern sizing of structural members and provide calculation methods to assist in the design process. Thus, while shaking impacts would be potentially damaging, they would also tend to be reduced in their structural effects due to CBSC criteria that recognize this potential. The CBSC includes provisions for buildings to structurally survive an earthquake without collapsing and includes measures such as anchoring to the foundation and structural frame design. The City of Eastvale General Plan (Policy S-2) requires that all new buildings in the city be built under the seismic requirements of the CBSC and encourages the design of critical facilities with greater margins of safety. Action Item S-2.1 requires geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. These site-specific geotechnical investigations would demonstrate that proposed buildings would be constructed to meet CBSC requirements as well as site-specific requirements prescribed by the geotechnical investigations.

Additionally, the Seismic Hazards Mapping Act requires that cities use the Seismic Hazard Zone Maps in their land use planning and building permit processes and that site-specific geotechnical investigations be conducted within the Zones of Required Investigation in order to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. These requirements would ensure this impact would be **less than significant**.

Threshold Discussion 3.9.3 The project site includes soils that may be subject to seismic-related ground failure, including liquefaction and landslide. This impact is considered **less than significant**. (Threshold 1c)

Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake. Earthquake waves cause water pressures to increase in the sediment and the sand grains to lose contact with each other, leading the sediment to lose strength and behave like a liquid. The soil can lose its ability to support structures, flow down even very gentle slopes, and erupt to the ground surface to form sand boils. Many of these phenomena are accompanied by settlement of the ground surface, usually in uneven patterns that damage buildings, roads, and pipelines (USGS 2015a). River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction. Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in lower susceptibility.

According to Map My County (Riverside County 2015), the project site is located in an area mapped as having “moderate” and “high” liquefaction potential. Additionally, soil types most susceptible to liquefaction are saturated, loose, sandy soils. Soils on the project site have a high percentage of sand. Due to the site’s location in a mapped potentially liquefiable area and because of the composition of the soil (high sand percentage), the project site has a potentially high susceptibility for liquefaction.

To minimize potential impacts associated with seismically induced liquefaction, future development would be designed in accordance with CBSC requirements. Additionally, as discussed, the City’s General Plan (Policy S-2) requires that all new buildings in the city be built under the seismic requirements of the CBSC and encourages the design of critical facilities with greater margins of safety. Action Item S-2.1 requires geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development

3.9 GEOLOGY AND SOILS

review process. These site-specific geotechnical investigations would demonstrate that proposed buildings would be constructed to meet CBSC requirements as well as site-specific requirements prescribed by the geotechnical investigations. These requirements would reduce impacts associated with liquefaction-related hazards. Therefore, impacts related to liquefaction hazards are **less than significant**.

Threshold Discussion 3.9.4 The project site is located in a region designated as an area of low landslide activity. This impact is considered **less than significant**. (Threshold 1d)

The project site and surrounding area are relatively flat, making the possibility of landslides extremely remote. There is no potential for landslides to occur on or near the project site as a result of any future development. Therefore, project implementation would result in **less than significant** impacts associated with the exposure of people or structures to potential substantial adverse effects involving landslides.

Threshold Discussion 3.9.5 Grading activities associated with implementation of the proposed project could expose soil, resulting in soil erosion or the loss of topsoil. Therefore, impacts are **less than significant**. (Threshold 2)

The proposed project site is currently an active dairy with outbuildings and a residence. Grading and excavation activities associated with construction of the proposed project (including clearing the site of debris and/or vegetation, soil excavation, grading, asphalt paving, building construction, and landscaping) would expose soils to potential short-term erosion by wind and water.

However, all demolition and construction activities related to the proposed project would be subject to compliance with the CBSC. Additionally, development would be subject to compliance with the requirements set forth in the National Pollutant Discharge Elimination System (NPDES) Storm Water General Construction Permit for construction activities (discussed in further detail in Section 3.11, Hydrology and Water Quality).

Compliance with the CBSC and the NPDES would minimize effects from erosion and ensure consistency with the Santa Ana Regional Water Quality Control Board's (1995) Water Quality Control Plan for the Santa Ana River Basin, which establishes water quality standards for the groundwater and surface water in the region.

Additionally, all development in the project site will be required to comply with Eastvale Municipal Code Chapter 14.12, Stormwater Drainage System Protection Regulations, which requires new development or redevelopment projects to control stormwater runoff by implementing appropriate best management practices (BMPs) to prevent deterioration of water quality. The displacement of soil through cut and fill will be controlled by Chapter 33 of the 2013 California Building Standards Code relating to grading and excavation, other applicable building regulations, and standard construction techniques; therefore, there will be no significant impact.

A stormwater pollution prevention plan (SWPPP) would be required as part of the grading permit submittal package. The SWPPP provides a schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details and a time schedule. The SWPPP would consider the full range of erosion control best management practices, including any additional site-specific and seasonal conditions.

NPDES requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development. Water quality features intended to reduce construction-related erosion impacts will be clearly noted on the grading plans for implementation by the construction contractor.

The City routinely requires the submittal of detailed erosion control plans with any grading plans. Compliance with this standard requirement is expected to address any erosional issues associated with grading and overexcavation of the site.

Fugitive dust would be controlled in compliance with South Coast Air Quality Management District Rule 403 (see Section 3.3, Air Quality).

In accordance with Clean Water Act and NPDES requirements, water erosion during construction would be minimized by limiting certain construction activities to dry weather, covering exposed excavated dirt during periods of rain, and protecting excavated areas from flooding with temporary berms.

As a result, impacts associated with soil erosion are considered **less than significant** with the implementation of the necessary erosion and runoff control measures required as part of the approval of a grading plan.

Threshold Discussion 3.9.6 The proposed project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts are considered **less than significant**. (Threshold 3)

Subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence may be caused by a variety of human and natural activities, including earthquakes.

As discussed in Subsection 2.1, Existing Setting, the project site is located in a susceptible subsidence zone. However, development associated with the proposed project would be designed in accordance with CBSC requirements. Additionally, as discussed in Subsection 2.1, Existing Setting, existing literature and mapping indicate that on-site soils generally have low shrink-swell potential because they are generally sandy.

As part of future development of the Leal Master Plan area, the project site would be graded and the areas underlying the building pads would be soil engineered in accordance with the recommendations of a design-level geotechnical study and the requirements of the CBSC. This requirement is established by Eastvale General Plan Policy S-2, which requires that all new buildings in the city be built under the seismic requirements of the CBSC and encourages the design of critical facilities with greater margins of safety. Additionally, site-specific geotechnical studies are required (General Plan Action Item S-2.1) as part of the environmental and development review process. These practices would ensure that proposed structures are located on stable soils and geologic units and would not be susceptible to settlement or ground failure. Therefore, impacts would be **less than significant**.

Threshold Discussion 3.9.7 Existing literature and mapping indicate that on-site soils are not expected to have high expansion potential. However, imported soils or soils used near finish grade may have a different expansion

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index than what was tested. Impacts associated with this issue area are **less than significant**. (Threshold 4)

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subjected to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of both building foundations and slabs-on-grade could result.

Based on existing literature and mapping, on-site soils do not have a high expansion potential because they are generally sandy and have a low percentage of clay. Primary soil types found on-site have relatively rapid permeability rates due to low clay content. Based on these factors, on-site soils are not expected to have high expansion potential. Therefore, impacts associated with expansive soils are considered **less than significant**.

Threshold Discussion 3.9.8 Implementation of the proposed General Plan would result in the conversion of important farmlands, as designated by the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use. However, based on the City's General Plan, this is considered a **less than significant** impact. (Threshold 6)

Implementation of the proposed project would result in the conversion of agricultural land to urban uses. Since the 1990s, Eastvale and the surrounding areas have grown more urbanized. As of 2015, only one dairy remains in Eastvale, a significant decrease from the large number that operated between 1950 and 1990.

The soils on the project site contain approximately 70.6 acres of Prime Farmland and 66.2 acres of Farmland of Local Importance. The project will convert Prime Farmland to urban uses. However, the City's General Plan and General Plan EIR determined that conversion of agricultural land was a significant and unavoidable impact of land development within the Eastvale city limits. General Plan Policy AQ-39 states that the loss of agricultural productivity on lands designated for urban uses within the city limits is anticipated as a consequence of the city's development.

Because this property was designated for development, the conversion of agricultural uses is consistent with the adopted General Plan and General Plan EIR. Therefore, this impact is **less than significant**.

3.9.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.9.9 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in Eastvale, would not contribute to cumulative geologic and soils impacts. The proposed project's incremental contribution would be **less than cumulatively considerable**. (Threshold 7)

All new development in Eastvale would be required to comply with the California Building Standards Code, which mandates stringent earthquake-resistant design parameters and common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of 1 or more acres, or any project

involving less than 1 acre that is part of a larger development plan and includes clearing, grading, or excavation, is subject to NPDES provisions. NPDES requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development by requiring an approved SWPPP that provides a schedule for the implementation and maintenance of erosion control measures and a description of erosion control practices, including appropriate design details and a time schedule.

Further, implementation of NPDES requirements and CBSC standards, as discussed under Impacts 3.9.2 through 3.9.7 above, would reduce cumulative impacts associated with geology and soils throughout the region. Furthermore, site-specific review, including geotechnical reports, required by the City of Eastvale would reduce the Leal Master Plan's contribution to cumulative impacts to **less than cumulatively considerable**.

Threshold Discussion 3.9.10 Implementation of the proposed Master Plan, along with regional and statewide growth, would result in a contribution to the conversion of important farmland. However, this is a **less than cumulatively considerable** impact. (Threshold 8)

Future development resulting from implementation of the proposed project would result in the conversion of agricultural land to urban uses. Since the 1990s, Eastvale and the surrounding areas have grown more urbanized. As such, it is likely that over time most or all of the dairies in Eastvale will be converted to urban uses. The project will result in the future conversion of Prime Farmland; however, the City's General Plan and General Plan EIR determined that conversion of agricultural land was a significant and unavoidable impact of land development within the Eastvale city limits. Because this property was designated for development, the conversion of agricultural uses is consistent with the adopted General Plan and General Plan EIR. Since the conversion of agricultural land to urban uses is consistent with the City's General Plan (Policy AQ-39), associated impacts are **less than cumulatively considerable**.

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3.10 HAZARDS AND HAZARDOUS MATERIALS

3.10.1 OVERVIEW

This section concludes that the existing buildings associated with the dairy may contain asbestos, lead paint, or polychlorinated biphenyls (PCB) and that demolition of the existing structures could expose the environment or humans to hazardous materials. Adherence to mitigation measures included in the Leal Master Plan Mitigation Program would ensure future development adequately mitigates adverse impacts and would reduce all impacts related to potential hazardous building materials on-site to less than significant.

3.10.2 MITIGATION MEASURES

The following mitigation measures are included in the Leal Master Plan Mitigation Program and as such, are required to be implemented by every subsequent development plan and/or project submitted in Stages 2 and 3 of the Staged Development Process within the Master Plan area. An individual project would be exempt from the following mitigation only if the project applicant submits site-specific environmental analysis demonstrating that the mitigation is not applicable or not necessary (e.g., the measure does not apply to site-specific conditions or has been "discharged" or "completed" with physical changes completed by a prior project/plan).

MM 3.10.2a **Asbestos.** Prior to the issuance of any permit for the demolition or alteration of existing structure(s), a letter shall be provided to the Planning Department from a qualified asbestos abatement consultant indicating that no asbestos-containing materials (ACM) are present in the building. If ACMs are found to be present, they will need to be abated in compliance with the South Coast Air Quality Management District's Rule 1403 and all other applicable state and federal rules and regulations.

Lead Paint. Prior to issuance of any permit for the demolition or alteration of the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Eastvale Building Safety and Inspection Department. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations.

Polychlorinated Biphenyls. Prior to issuance of a demolition permit, a polychlorinated biphenyls (PCB) abatement contractor shall conduct a survey of the project site to identify and assist with compliance with applicable state and federal rules and regulations governing PCB removal and disposal.

Timing/Implementation: *Prior to the issuance of demolition permit*

Enforcement/Monitoring: *City of Eastvale Building and Planning Departments*

MM 3.10.2b Prior to the issuance of any individual grading permit, a Phase I Environmental Site Assessment (ESA) shall be conducted to determine the potential for contaminated soil or groundwater on the site. If the Phase I ESA determines that the potential exists for contaminated soil or groundwater on-site, the project applicant shall conduct a Phase II ESA and shall follow its recommendations to remediate any potentially contaminated soil or groundwater. On-site contaminants must be addressed to the satisfaction of either Cal/EPA or the Riverside County Waste Management Department, with

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their approval of completion of activities/remedial action plans (RAP) submitted to the Eastvale Department of Building and Construction prior to the issuance of a grading permit.

Timing/Implementation: Prior to issuance of individual grading permit

Enforcement/Monitoring: City of Eastvale Building and Planning Departments

MM 3.10.2c All trash and debris observed on-site shall be removed prior to construction activities and disposed of at a landfill or approved dumpsite.

Timing/Implementation: Prior to construction activities

Enforcement/Monitoring: City of Eastvale Building and Planning Departments

3.10.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less Than Significant
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Less Than Significant with Mitigation
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less Than Significant
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	No Impact
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.	No Impact
6) For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.	No Impact
7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant
8) Expose people or structures to significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	No Impact
9) Result in cumulative hazardous risk impacts.	Less Than Cumulatively Considerable

There are no public airports on the project site or in the vicinity. The closest major airport is Chino Airport, 5 miles away. However, the Leal Master Plan area is not within a compatibility zone

established for the Chino Airport Influence Area (City of Eastvale 2012). Therefore, hazards associated with public airports or private airstrips (Thresholds 5 and 6) are not discussed further in this Draft EIR.

3.10.4 METHODOLOGY

The project site has not been formally evaluated for the potential for hazardous building materials in the existing buildings, including those used by the currently active dairy. The analysis of hazards in this Draft EIR was based on review of existing documentation provided by agencies such as the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and US Environmental Protection Agency (EPA) for hazardous sites in the city, as well as review of applicable fire codes and regulations, the existing City of Eastvale Municipal Code, the City of Eastvale General Plan Safety Element, and other relevant literature. The impact analysis below focuses on whether impacts would have a significant effect on the physical environment and/or on the health of the public.

3.10.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.10.1 Implementation of the proposed project would require the use and transportation of limited amounts of commonly used hazardous materials, including solvents, paints, gasoline, fertilizers, and pesticides, during project construction and operation. Impacts related to upset of these materials would be **less than significant**. (Threshold 1)

The project proposes future development of mixed-use residential and commercial uses and, during the construction phases, future development associated with the Master Plan would involve construction, demolition, and landscaping activities, which could result in the transport, use, and disposal of hazardous materials such as gasoline fuels, demolition materials, asphalt, lubricants, toxic solvents, pesticides, and herbicides. The transport, use, and disposal of these materials could pose a potential hazard to the public and the environment. However, construction activities would be short term.

The project proposes both commercial and residential development in the Master Plan area. Neither commercial nor residential development is expected to involve the routine transport, use, or disposal of hazardous materials in significant quantities. Generally, the exposure of persons to hazardous materials could occur through improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; an accident during transport; environmentally unsound disposal methods; or fire, explosion, or other emergencies. Therefore, no specific type of hazard associated with the use of these materials can be identified, and the likelihood of a hazard presenting a serious health or safety hazard to the public cannot be determined at this time.

The proposed project would be required to comply with all applicable local, state, and federal regulations during project construction and operation. The Riverside County Department of Environmental Health is the Certified Unified Program Agency (CUPA) for Riverside County and is responsible for consolidating, coordinating, and making consistent the administrative requirements, permits, inspections, and enforcement activities of state standards regarding the transportation, use, and disposal of hazardous materials in Riverside County, including Eastvale. Any commercial use developed would be required to comply with Riverside County's Hazardous Material Management Plans (Business Emergency Plans) that include an inventory of hazardous

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materials used, handled, or stored on-site. Businesses would be required to submit their plans to the CUPA, which would make the plan available to emergency response personnel.

While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials and with the safety procedures mandated by applicable federal, state, and local laws and regulations. Compliance with these regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the proposed project would be **less than significant**.

Threshold Discussion 3.10.2 Implementation of the proposed project could result in the accidental release of hazardous materials into the environment. Therefore, impacts are considered **potentially significant**. (Threshold 2)

Short-Term Impacts

One of the means through which human exposure to hazardous substance could occur is accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, hazardous substances can migrate into the soil or enter a local stream or channel, causing contamination of soil and water. Human exposure to contaminated soil or water can have potential health effects from a variety of factors, including the nature of the contaminant and the degree of exposure.

Construction activities associated with the proposed project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. There is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant because of the small volume and low concentration of hazardous materials used during construction. Construction contractors would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal laws.

The site is currently an active dairy, as well as the residence of one of the property owners. Based on a site visit conducted on May 26, 2015, and analysis of aerial imagery (Google Earth 2015), several buildings are located on the project site. The ages of the buildings are unknown at this time. Therefore, the potential exists for hazardous building materials on-site, including asbestos and/or lead paint. Additionally, minor nuisance dumping, such as abandoned vehicles and trucks, and other debris, were noted during the site visit. As a result of on-site dumping, there may be a potential for polychlorinated biphenyls (PCB) soil contamination. With the implementation of mitigation measures **MM 3.10.2a** through **MM 3.10.2c**, project impacts would be reduced to **less than significant**.

Long-Term Operational Impacts

The potential future increase in the amount of hazardous materials utilized as part of long-term operations cannot be predicted, since the end-users of any future buildings are not known at this time. The analysis presented below examines the potential nature and magnitude of risks associated with the accidental release of hazardous materials often used during operations of typical mixed-use commercial and residential development projects.

Typical incidents that could result in accidental release of hazardous materials involve leaking storage tanks, spills during transport, inappropriate storage, inappropriate use, and/or natural disasters. If not remediated immediately and completely, these and other types of incidents could cause toxic fumes and contamination of soil, surface water, and groundwater. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects from a variety of factors, including the nature of the contaminant and the degree of exposure.

Leaking Storage Tanks

Chemicals and wastes stored in aboveground or underground storage tanks would follow guidelines mandated by federal and state agencies. Underground storage tanks and connecting piping would be double-walled and would have monitoring devices with alarms installed to constantly monitor for unauthorized releases in accordance with federal and state standards. Applicable existing standards include the California Environmental Protection Agency's (Cal/EPA) Aboveground Petroleum Storage Act, California Division of Occupational Safety and Health (Cal/OSHA) operational requirements, California Health and Safety Code Section 25270.7, and Riverside County Department of Environmental Health regulations regarding the installation and operation of aboveground and underground tanks. These existing measures would minimize impacts to **less than significant**.

Off-Site Transport

Transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. The potential exists for licensed vendors to transport hazardous materials to and from commercial and retail components in the project site. Accidental releases would most likely occur along transport routes leading to and from these areas. The US Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the Code of Federal Regulations and implemented by Title 13 of the California Code of Regulations. Appropriate documentation would be provided for all hazardous waste transported in connection with specific activities on the project site, as required by existing hazardous materials regulations.

The proposed project would be subject to compliance with all applicable federal, state, and local laws (including Title 49 of the Code of Federal Regulations) and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste. Compliance with these regulations would reduce the likelihood and severity of accidents during transit. Therefore, impacts would be **less than significant**.

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Storage and Handling

Hazardous materials must be stored in designated areas designed to prevent accidental release to the environment. California Building Standards Code (CBSC) requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal and state laws related to the storage of hazardous materials would be required to maximize containment and provide for prompt and effective cleanup, if an accidental release occurs, thereby ensuring that a less than significant impact would occur.

Hazardous materials use would present a slightly greater risk of accident than hazardous materials storage. However, for those employees who would work with hazardous materials, the amount of hazardous materials handled at any one time is generally relatively small, reducing the potential consequences of an accident during handling. The Riverside County Fire Department and Environmental Health Hazmat Program staff would respond to hazardous materials incidents. Major hazardous materials accidents associated with commercial/retail uses are infrequent and additional emergency response capabilities are not anticipated to be necessary to respond to potential incidents that could result from the proposed project. In addition, the CUPA would require that any business where the maximum quantity of a regulated substance exceeds the specified threshold quantity register with the County as a manager of regulated substances and prepare a Risk Management Plan.

In summary, compliance with the established regulatory framework and recommended mitigation would ensure that potential impacts are **less than significant** by requiring compliance with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and handling through the implementation of established safety practices, procedures, and reporting requirements.

Once implemented, mitigation measure **MM 3.10.2a** would ensure that the potential for the release of hazardous building materials into the environment during demolition of the existing buildings on the site and would reduce any impacts to less than significant. Additionally, mitigation measure **MM 3.10.2b** would determine whether the on-site debris caused any potential soil or groundwater contamination. If a Phase I ESA determines that there is on-site soil contamination, a Phase II ESA would provide recommendations on ways to remediate potentially contaminated soil or groundwater. Mitigation measure **MM 3.10.2c** will ensure that any trash and debris is removed and taken to an approved dumpsite. The implementation of mitigation measures **MM 3.10.2a** through **MM 3.10.2c** would reduce impacts to **less than significant**.

Threshold Discussion 3.10.3 The proposed project would not pose a risk to nearby schools or proposed school facilities. Therefore, impacts are **less than significant**. (Threshold 3)

The project site is located within 0.20 miles of Harada Elementary School. However, as described in response to Threshold 1, hazards to the public or to the environment through the routine use, handling, transport, and storage of hazardous materials would be subject to federal, state, and local health and safety requirements. The storage, handling, and disposal of hazardous materials are regulated by the EPA, OSHA, and the Fire Department. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. As such, impacts would be **less than significant**.

Threshold Discussion 3.10.4 The project is not located on a site included on a list of hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, **no impacts** would occur. (Threshold 4)

A search of government hazardous materials databases determined that no reported hazardous materials sites are located on the project site (DTSC 2015a; SWRCB 2015). Thus, **no impacts** would occur in this regard.

Threshold Discussion 3.10.5 The proposed project site would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be **less than significant**. (Threshold 7)

The City of Eastvale's (2013) Local Hazard Mitigation Plan (LHMP) identifies the City's emergency planning, organization, and response policies and procedures. The LHMP provides guidance for the City's response to extraordinary emergency situations associated with natural and man-made disasters. Additionally, Eastvale Municipal Code Section 130.08.020, General Street Design, regulates street design standards to ensure that land divisions located in high fire hazard areas have adequate alternate or secondary access roads.

Municipal Code Section 130.08.040, Street Grades, regulates street design to ensure that street grades in the city are more compatible with existing terrain; unless approved by the Transportation and Fire departments, street grades may not exceed 16 percent. These provisions reduce risks associated with inadequate access by emergency responders.

Implementation of the proposed project and the potential development associated with it would not impair the City's ability to implement its emergency response plan or use its emergency evacuation routes. Circulation through the project site would be maintained, as much as feasible, and applicable emergency services would be notified of any potential road closures associated with project construction. Therefore, impacts would be **less than significant**.

Threshold Discussion 3.10.6 The proposed project would not expose people or structures to a risks associated with wildland fires. **No impact** would occur. (Threshold 8)

The project site is not designated as a fire hazard severity zone within the Local Responsibility Area (LRA) for Eastvale (Cal Fire 2015). Therefore, **no impact** would occur.

3.10.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.10.7 Implementation of the proposed Master Plan, in addition to cumulative development associated with the proposed project, would not result in cumulative hazardous risk impacts. Therefore, impacts are **less than cumulatively considerable**. (Threshold 9)

Implementation of the proposed project would result in potential short-term impacts during construction activities associated with exposure to hazards such as possibly contaminated soils. However, hazards and hazardous materials impacts associated with the project would be site-specific and would not contribute to cumulative hazardous impacts. Cumulative development in the region is not anticipated to result in significant hazards or hazardous materials impacts.

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The proposed project will not combine with any planned growth in the area to form a hazards impact greater or more significant than the project impact alone. Therefore, the cumulative hazards impacts are considered **less than cumulatively considerable**.

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3.11.1 OVERVIEW

This section concludes that the proposed project could result in erosion or in degradation of downstream surface water and groundwater resources; however, compliance with state and local regulatory requirements would reduce impacts. The analysis determines that future development anticipated as a result of the proposed project would require no mitigation measures to conclude that impacts are less than significant or less than cumulatively considerable.

3.11.2 MITIGATION MEASURES

None required.

3.11.3 THRESHOLDS OF SIGNIFICANCE

The following is a listing of the thresholds used to determine the significance of project impacts, as well as a summary of the conclusions discussed in detail later in this section.

Threshold	Determination
1) Violate any water quality standards or waste discharge requirements.	Less Than Significant
2) 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).	Less Than Significant
3) 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.	Less Than Significant
4) 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.	Less Than Significant
5) Otherwise substantially degrade water quality.	Less Than Significant
6) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	No Impact
7) Place within a 100-year flood hazard area structures which would impede or redirect flood flows.	No Impact
8) Expose people or structures to a significant loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.	No Impact
9) Inundation by seiche, tsunami, or mudflow.	No Impact
10) Cumulative impacts to hydrology and water quality.	Less Than Cumulatively Considerable

The project site is in a Federal Emergency Management Agency (FEMA) designated flood hazard Zone X, which indicates that the site is subject to a minimal risk of flooding (FEMA 2015). No impact will occur, and these issues (Thresholds 6 and 7) will not be addressed further in this Draft EIR.

3.11 HYDROLOGY AND WATER QUALITY

Riverside County is responsible for identifying dam inundation hazard areas in the county. A review of records maintained at the California Office of Emergency Services provided potential failure inundation maps for 23 dams affecting Riverside County; these maps were compiled into geographic information system (GIS) digital coverage of potential dam inundation zones. Based on a review of these maps, Eastvale is not in an area that would be affected by inundation due to the failure of an upstream dam (Eastvale 2012). In addition, the project is not in the vicinity of any levees. Therefore, no impact would occur, and this issue (Threshold 8) will not be addressed further in this Draft EIR.

The project site is not located near any large inland bodies of water or the Pacific Ocean so as to be inundated by seiches or tsunamis, nor is the project site located on or near steep slopes where rapid erosion could trigger mudflows. As such, no impact is associated with this issue area. Therefore, no impact would occur, and this issue (Threshold 9) will not be addressed further in this Draft EIR.

3.11.4 METHODOLOGY

Primary sources of information include FEMA flood hazard mapping, the City of Eastvale General Plan (2012), National Pollutant Discharge Elimination System (NPDES) Order No. R8-2010-003, NPDES No. CAS 618033, as amended by R8-2013-0024, NPDES No. CAS618033, the Riverside County Drainage Area Management Plan (Cities and County of Riverside 2014), and the Water Quality Control Plan for the Santa Ana River Basin (Santa Ana RWQCB 1995).

3.11.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.11.1 Construction and operation of the proposed project could result in erosion or in degradation of downstream surface water and groundwater resources. However, compliance with the requirements of the SWRCB's Construction General Permit during construction and implementation of best management practices during operations would minimize the potential for such degradation. As such, this impact is considered **less than significant**. (Thresholds 1 and 5)

Urban runoff (both dry and wet weather) discharges into storm drains and, in most cases, flows directly to creeks, rivers, lakes, and the ocean. Polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Urban runoff pollution includes a wide array of environmental, chemical, and biological compounds from both point and nonpoint sources. In the urban environment, stormwater characteristics depend on site conditions (e.g., land use, impervious cover, pollution prevention, types and amounts of best management practices), rain events (duration, amount of rainfall, intensity, and time between events), soil type and particle sizes, multiple chemical conditions, the amount of vehicular traffic, and atmospheric deposition. Major pollutants typically found in runoff from urban areas include sediments, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, pathogens, and bacteria. Most urban stormwater discharges are considered nonpoint sources and are regulated by an NPDES Municipal General Permit or Construction General Permit.

Urban runoff can be divided into two categories: "dry" and "wet weather."

- Dry weather urban runoff occurs when there is no precipitation-generated runoff. Typical sources include landscape irrigation runoff, driveway and sidewalk washing, noncommercial vehicle washing, groundwater seepage, fire flow, potable water line

operations and maintenance discharges, and permitted or illegal non-stormwater discharges.

- Wet weather urban runoff refers collectively to nonpoint source discharges that result from precipitation (in Eastvale, this will be rain). Wet weather runoff includes stormwater, which is generated by rainfall runoff from land and impervious areas such as rooftops, paved streets, and parking lots.

Wet and dry weather runoff typically contains similar pollutants. However, except for the “first flush” concentrations following a long period between rainfall events, the concentration levels found in wet weather flows are typically lower than levels found in dry weather flows because the larger wet weather flows dilute the amount. Typically, first flush storm water events have higher concentrations of contamination during the earlier in the storm event as opposed to later in the storm event (Caltrans 2005).

A net effect of development can be to increase pollutant export over naturally occurring conditions. However, an important consideration in evaluating stormwater quality is to assess whether it impairs the beneficial use of the receiving waters. Receiving waters can assimilate a limited quantity of various constituent elements; however, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. For this evaluation, impacts to stormwater quality would be considered significant if the project did not attempt to address stormwater pollution to the maximum extent practicable.

Existing Conditions

In the absence of site-specific data, expected stormwater quality can be qualitatively discussed by relating typical pollutants to specific land uses. Because there is no available information on stormwater quality, this method was used to prepare the following analysis.

The project site is currently heavily disturbed and is generally flat with some degree of impervious surface related to the dairy (i.e., paving, existing buildings) and horse farm. The expected pollutants in the existing condition stormwater runoff from the site include trash, bacteria, metals, oil, fertilizers, pesticides, manure, and grease. Under existing conditions, it is unlikely that any of the potential pollutants are removed prior to entering the City’s storm drain systems.

Short-Term Construction

During construction activities, erosion potential and the possibility of water quality impacts are always present. Erosion occurs when protective vegetative cover is removed and soils are disturbed. Construction activities can result in sediment runoff rates that greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters.

In addition to sediment, stormwater flowing over a construction site can carry various pollutants such as nutrients, bacteria and viruses, oil and grease, heavy metals, organics, pesticides, gross pollutants, and miscellaneous waste into receiving waters. These pollutants can originate from soil disturbances, construction equipment, building materials, and workers.

To minimize the potential for contamination of stormwater during construction, a stormwater pollution prevention plan (SWPPP) is required as part of the grading permit submittal package. The SWPPP will incorporate a series of specific measures that will be included in the construction process to address erosion, accidental spills, and the quality of stormwater runoff. The SWPPP is a “living document” and as such can be modified as construction activities progress.

3.11 HYDROLOGY AND WATER QUALITY

The best management practices that must be implemented as part of a SWPPP can be grouped into two major categories:

- Erosion and sediment control BMPs
- Non-stormwater management and materials management BMPs

Erosion and sediment control BMPs fall into four main subcategories:

- Erosion controls
- Sediment controls
- Wind erosion controls
- Tracking controls

These are discussed below.

Erosion controls include practices to stabilize soil, to protect the soil in its existing location, and to prevent soil particles from migrating. Examples of erosion control measures include preserving existing vegetation, mulching, and hydroseeding.

Sediment controls are practices to collect soil particles after they have migrated but before the sediment leaves the site. Examples of sediment control measures are street sweeping, fiber rolls, silt fencing, gravel bags, sand bags, storm drain inlet protection, sediment traps, and detention basins.

Wind erosion controls prevent soil particles from leaving the site in the air. Examples of wind erosion control measures include applying water or other dust suppressants to exposed soils on the site.

Tracking controls prevent sediment from being tracked off site via vehicles leaving the site, such as by washing tires.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. Non-stormwater BMPs tend to be management practices with the purpose of preventing stormwater from coming into contact with potential pollutants.

Examples of non-stormwater measures include preventing illicit discharges (any discharge to the storm drain system that is not composed entirely of stormwater runoff except discharges made pursuant to a NPDES permit or as otherwise authorized by the Santa Ana, San Diego, or Colorado River Basin Regional Water Quality Control Board) and implementing good practices for vehicle and equipment maintenance, cleaning, and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites.

Examples of materials management BMPs include:

- Good housekeeping activities, such as keeping stored materials covered and elevated off the ground in a central location.

- Securely locating portable toilets away from the storm drainage system and performing routine maintenance or using secondary containment around portable toilets.
- Providing a central location for concrete washout and performing routine maintenance.
- Providing dumpsters and trash cans throughout the construction site for litter/floatable (i.e., buoyant materials such as Styrofoam) management.

The proposed project falls under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB) and drains into the Santa Ana River watershed. None of the receiving water bodies (see **Table 2.1-11** in Subsection 2.1, Existing Setting) are designated municipal separate storm sewer systems (MS4s); however, they are designated as Tributaries to Receiving Waters, River (Santa Ana RWQCB 2013). Stormwater draining from the site would enter the City's storm drainage system. The project is subject to the Riverside County Storm Water Permit, also issued by the RWQCB (Order No. R8-2010-003, NPDES No. CAS 618033, as amended by R8-2013-0024, NPDES No. CAS618033) for discharges into the municipal separate storm sewer systems draining the county. The Santa Ana MS4 Permit is for the portion of the Santa Ana River watershed in Riverside County. The City of Eastvale is a permittee under the Santa Ana MS4 Permit. This permitting program includes inspections of construction sites, commercial facilities, and municipal stormwater inspections, development of BMPs for existing development, comprehensive water quality monitoring, and assessment of stormwater program effectiveness, among other measures to meet specific water quality standards. Additionally, any discharges into MS4s require the preparation of a water quality management plan (WQMP), which identifies specific BMPs to be incorporated into the design and typically includes design measures that will minimize urban runoff, minimize impervious footprint, conserve natural areas, and minimize directly connected impervious areas.

Additionally, the Construction General Permit requires that construction sites be inspected before and after storm events and every 24 hours during extended storm events. The purpose of the inspections is to identify maintenance requirements for the BMPs and to determine the effectiveness of the BMPs that are being implemented. Additional requirements include compliance with post-construction standards focusing on low impact development (LID) and preparation of rain event action plans.

Project Operation

The proposed project would convert approximately 160 acres into mixed-use residential and commercial uses. This conversion will substantially increase the impervious surface area of the project site through the introduction of new and improved roads and driveways, parking areas, rooftops, and other surfaces.

An increase in impervious surface area would substantially increase runoff potentially containing urban pollutants. Additionally, runoff associated with landscaped areas typically contributes pollutants from fertilizers and pesticides.

Runoff from urban land use typically contains oils, grease, fuel, antifreeze, and byproducts of combustion (such as lead, cadmium, nickel, and other metals), as well as nutrients from fertilizers, sediment, pesticides, herbicides, and other pollutants. In the residential areas of the project, animal waste from pets could contribute bacterial pollutants into surface and source waters.

3.11 HYDROLOGY AND WATER QUALITY

Precipitation during the early portion of the wet season places these pollutants into stormwater runoff, resulting in high pollutant concentrations in the initial wet weather runoff.¹ The first flush of heavy metals and hydrocarbons would typically occur during the first storm of the season.

The amount and type of runoff generated with implementation of the proposed project will be greater than that under existing conditions due to an increase in the amount of impervious surfaces. An increase in impervious surface area would substantially increase runoff potentially containing urban pollutants and first flush roadway contaminants such as heavy metals, oil and grease, and nutrients (i.e., nitrates and phosphates). These constituents may result in water quality impacts to on- and off-site drainage flows and to downstream area waterways.

Water in the proposed project area drains to the Santa Ana River watershed. Within the watershed, the proposed project site drains to two receiving waters, both of which are Section 303(d) listed impaired waterways, as detailed in **Table 2.1-11** (see Subsection 2.1, Existing Setting). Expected pollutants that would contribute to the Section 303(d) impaired water bodies are unknown at this time and would be project-specific. However, the most common categories of pollutants in urban runoff include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., copper, lead, zinc, and cadmium), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and polychlorinated biphenyls [PCB]), nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation), detergents, and trash. To reduce urban runoff impacts associated with potential pollutants, a water quality management plan (WQMP) specific to each individual site would be required. Additionally, the City of Eastvale General Plan contains policies with requirements that address surface water quality impacts. For instance, the intent of Policy AQ-22 is to decrease stormwater pollution by reducing pavement in development areas and through design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention. Additionally, Policy AQ-25 seeks to minimize pollutant discharge into storm drainages, natural drainages, and aquifers.

City of Eastvale Municipal Code Chapter 14.12, Stormwater Drainage System Protection Regulations, establishes requirements for stormwater and non-stormwater quality discharge and control by prohibiting discharges of pollutants or waters containing pollutants that cause or contribute to a violation of applicable water quality standards. In addition, a project-specific water quality management plan (which also addresses drainage and hydrology), in compliance with the Areawide Urban Runoff Management Program, would be required. Compliance with Municipal Code Chapter 14.12 and adherence to existing policies contained in the General Plan and to General Construction Activity Stormwater Permit requirements would result in impacts to water quality that are **less than significant**.

Threshold Discussion 3.11.2 The proposed project is supplied potable water from an adjudicated groundwater basin for which pumping and recharge are strictly monitored, managed, and reported, to maintain hydrologic balance. Therefore, impacts are considered **less than significant**. (Threshold 2)

Potable water in the City of Eastvale is supplied by local groundwater from the Chino Groundwater Basin provided by the Jurupa Community Services District (JCS D). As discussed in detail in Subsections 2.1 Existing Setting, 2.2 Regulatory Framework, and 3.13 Public Services and Utilities (Threshold Discussion 3.13.5), the Chino Basin was adjudicated by a judgment in 1978 (the

¹ This initial runoff, containing peak pollutant levels, is referred to as the "first flush" of storm events.

Judgement). 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. As such, all groundwater management activities within the Basin, including pumping and recharge, are strictly monitored, managed, and reported by the Chino Basin Watermaster. The Watermaster determines the safe yield of the Basin and uses groundwater artificial recharge as an integral part of maintaining hydrologic balance. The Chino Basin Watermaster has historically recharged the Chino Basin with stormwater recharge, State Water Project (SWP) water purchased from the Metropolitan Water District of Southern California, and recycled water when pumping exceeds the basin's safe yield. According to the Watermaster's 2013 Amendment to the 2010 Recharge Master Plan Update, given all anticipated groundwater production from the Basin, there is no need to construct additional supplemental water recharge capacity to meet future replenishment obligations through 2035. Therefore, as the groundwater basin serving the project is adjudicated and balance between withdrawal and recharge is achieved via groundwater management activities of the Watermaster, impacts would be **less than significant**.

Threshold Discussion 3.11.3 Development associated with the proposed project may alter the existing drainage pattern of the site to impact stormwater runoff rates and volumes compared to existing conditions. However, compliance with state and local policies reduces impacts to **less than significant**. (Thresholds 3 and 4)

When a site is developed, the site's natural drainage pattern is altered. Buildings, roads, and parking lots introduce impervious surfaces, such as roofing materials, asphalt, and concrete, to the landscape, resulting in a reduction in infiltration and an increase in the rate and volume of stormwater runoff. The increased flow rates and volumes of stormwater runoff may result in downstream erosion and/or flooding if not properly mitigated.

Development associated with the proposed project would alter drainage within the Master Plan area and increase stormwater runoff rates and volumes. Details of potential development associated with the Master Plan are unknown at this time. However, site-specific water quality management plans (required by existing City codes) would include appropriate methods that will be used to capture and detain runoff, thereby preventing downstream flooding and erosion. To ensure that the storm drainage system associated with each development project is appropriately designed and implemented, mitigation is proposed requiring the project to comply with the requirements set forth in the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. In addition, the project applicant is required to submit a stormwater pollution prevention plan to reduce erosion and sedimentation of downstream watercourses; refer to Threshold Discussion 3.11.1.

Further, future development on the project site would be required to prepare and submit a detailed erosion control plan for City approval prior to obtaining a grading permit. Implementation of this plan is expected to address any erosional issues associated with proposed grading and site preparation. Although future development would create new impervious surface on the property, development associated with the proposed project would result in opportunities for landscaped areas to be utilized for stormwater retention.

Compliance with Eastvale Municipal Code Chapter 14.12, submittal of a SWPPP and a water quality management plan, and adherence to policies in the City's General Plan would ensure that the project would not substantially alter the existing drainage pattern of the site such that substantial erosion or siltation would occur. As such, impacts are **less than significant**.

3.11 HYDROLOGY AND WATER QUALITY

3.11.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.11.4 The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the Santa Ana River watershed, could alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts in the overall watershed. This is considered a **less than cumulatively considerable** impact. (Threshold 10)

As discussed above, the proposed project could contribute to water quality degradation from construction and operation, flooding, and alteration of drainage patterns. In terms of construction, all development within the Master Plan area would require grading and construction. While the potential to degrade water quality exists, all future projects would be required to comply with the NPDES stormwater permitting program, which regulates water quality originating from construction sites.²

Future development on the project site would be required to prepare and submit a detailed erosion control plan for City approval prior to obtaining a grading permit. Implementation of this plan is expected to address any erosional issues associated with proposed grading and site preparation. Although future development would create new impervious surface on the property, development associated with the proposed project would result in opportunities for landscaped areas to be utilized for stormwater retention. All development is required to comply with Eastvale Municipal Code Chapter 14.12, submit a SWPPP and a water quality management plan, and adhere to policies in the City's General Plan. Compliance with these requirements would reduce impacts associated with erosion and water quality.

From an operational standpoint, the proposed project would not violate water quality standards because a WQMP would be required for all future development on the project site. As discussed earlier in this section, future projects must implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the water quality management plan. As such, the Master Plan, in conjunction with other planned and approved projects in the watershed, would not result in cumulatively considerable impacts to hydrology and water quality.

The proposed project's contribution to cumulative water quality, runoff, and flooding impacts is considered **less than cumulatively considerable**.

² The NPDES program requires the preparation and implementation of a stormwater pollution prevention plan for construction activities that disturb more than 1 acre, the implementation of best management practices that ensure the reduction of pollutants during stormwater discharges, and compliance with all applicable water quality requirements.

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3.11 HYDROLOGY AND WATER QUALITY

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3.12 POPULATION, HOUSING, AND EMPLOYMENT

3.12.1 OVERVIEW

This section concludes that while the proposed Leal Master Plan would facilitate growth on the project site, the growth would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan. The project would be consistent with the City's General Plan policies and goals intended to promote smart growth. The project requires no mitigation measures to conclude that no impact would occur or impacts would be less than significant and less than cumulatively considerable.

3.12.2 MITIGATION MEASURES

None required.

3.12.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Induce substantial growth or concentration of population in an area, either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).	Less Than Significant
2) Displace substantial numbers of existing housing, necessitating the construction or replacement housing elsewhere.	No Impact
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	No Impact
4) Result in a cumulative increase in population and housing that would induce substantial growth in Eastvale as well as in the surrounding western Riverside County region.	Less Than Cumulatively Considerable

3.12.4 METHODOLOGY

Changes in population and employment do not in and of themselves result in physical environmental impacts. However, they may result in the need for the construction of new housing, businesses, infrastructure, and services that provide for such growth. The potential physical environmental impacts of future development are evaluated in Sections 3.1 through 3.13 of this Draft EIR. The impact analysis below focuses on the project's potential to induce growth via population, housing, and employment increases.

3.12.5 PROJECT IMPACT ANALYSIS

Threshold Discussion 3.12.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would induce substantial growth or concentration of population the area, either directly or indirectly. This impact is considered **less than significant**. (Threshold 1)

The proposed Master Plan allows for residential medium density (14–21 units per acre) with no minimum or maximum and residential high density (22–40 units per acre) with a minimum of 500 dwelling units and a maximum of 660 dwelling units. In addition, the proposed Master Plan allows

3.12 POPULATION, HOUSING, AND EMPLOYMENT

for 325,000 to 1,300,000 square feet of mixed-use retail in a “lifestyle center” format, up to 225,000 square feet of general commercial, up to 920,000 square feet of mixed use office commercial, up to 450 hotel rooms, and a civic center on the project site.

Because the proposed Master Plan allows a range of development potential, the ultimate allocation of uses will depend on market conditions and timing. Any specific population or employment projections resulting from these land uses would be speculative at this time. However, implementation of the project would facilitate growth directly via increased housing units and associated population on the project site and indirectly via increased employment opportunities.

The project site is identified in the City’s General Plan as representing “a significant development opportunity” and in General Plan Policy LU-19 that calls for a mixed-use project with office, civic, hotel, multi-family residential, and recreation and entertainment land uses on the site.

Therefore, while development of the proposed project would enable increases in population, housing, and employment, those increases have been anticipated and accounted for through the City’s planning processes; the project would not induce growth beyond that already considered by the City. Future development of the Leal Master Plan would implement the long-range planning process for the project site envisioned in the City’s General Plan.

The required residential high density units will assist the City in meeting a portion of its State-mandated requirement for future residential development as discussed in Subsection 2.2, Regulatory Framework.

As discussed in Subsection 2.1, Existing Setting, most workers (86.5 percent) in Eastvale commute to work, with an average commute time of 41.4 minutes (as of 2013). This means that most residents must travel to other areas for work, which results in adverse environmental impacts including traffic congestion and increased air pollution. The project would provide employment opportunities for residents in the city, thus potentially improving the jobs/housing balance and reducing these impacts.

Therefore, while the Master Plan would facilitate growth on the project site, the growth would be an implementation of the long-range planning process for the project site as envisioned in the City’s General Plan. The project would be consistent with the City’s General Plan policies and goals intended to promote smart growth through mixed-use and infill development and to increase employment in Eastvale in order to reduce the need for residents to commute to work outside the city.

As such, this impact would be considered **less than significant**.

Threshold Discussion 3.12.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would displace substantial numbers of existing housing, necessitating the construction or replacement housing elsewhere. **No impact** would occur. (Thresholds 2 and 3)

The project site contains an operating dairy and horse farm and the residence of one of the property owners. Although the Master Plan would result in future development of the site that would displace the dairy and horse farm and one residence, the project is being proposed in cooperation with the property owner. The project will facilitate increased housing on the project

site and will not necessitate the construction of replacement housing elsewhere. Therefore, **no impact** would occur.

3.12.6 CUMULATIVE IMPACT ANALYSIS

Threshold Discussion 3.12.3 The project would be considered to have a cumulatively considerable impact if it would contribute to a cumulative increase in population and housing that would induce substantial growth in Eastvale as well as in the surrounding western Riverside County region. This impact is **less than cumulatively considerable**.

The cumulative setting condition includes Eastvale, as well as the larger western Riverside County region, which includes 17 incorporated cities and unincorporated areas of the county. The project's impact would be cumulatively considerable if, when considered with other existing, approved, and reasonably foreseeable development in the cumulative setting, it would contribute to substantial regional population, housing, and employment growth.

Because the land surrounding the property is already developed with residential, commercial, and retail uses, and the project would not require or result in the extension of infrastructure to an undeveloped area, it is unlikely that the proposed Master Plan would result in growth or intensification of development or sprawl in the surrounding region.

As discussed under Impact 3.12.1 above, the growth anticipated as a result of the project would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan. It would be consistent with the City's General Plan policies and goals intended to promote smart growth through mixed-use and infill development and to increase employment in Eastvale in order to reduce the need for residents to commute to work outside the city.

Furthermore, as discussed in Subsection 2.1, Existing Setting, WRCOG anticipates a growth rate of 11 percent for Eastvale and 28 percent for western Riverside County between 2020 and 2035. These growth rate forecasts are based, in part, on the City's General Plan, which anticipated development of the project site with a mixed-use project including both housing and employment-generating uses.

Therefore, the Leal Master Plan would not be expected to contribute to a cumulative increase in population, housing, and employment in the surrounding region beyond that projected by WRCOG. The impact would be **less than cumulatively considerable**.

3.12 POPULATION, HOUSING, AND EMPLOYMENT

REFERENCES

WRCOG (Western Riverside Council of Governments). 2011. *Western Riverside County Growth Forecasts 2010-2035*.

3.13 PUBLIC SERVICES AND UTILITIES

3.13.1 OVERVIEW

This section concludes that future development anticipated as a result of the proposed Leal Master Plan would increase demand for public services and utilities but that these services are generally in place and being provided to the Master Plan area.

Future development anticipated as a result of the proposed project would require no mitigation measures to conclude that impacts are less than significant or less than cumulatively considerable.

3.13.2 MITIGATION MEASURES

None required.

3.13.3 THRESHOLDS OF SIGNIFICANCE

Impacts are considered significant if implementation of the project would:

Threshold	Determination
1) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.	<u>Fire Protection/Emergency Medical</u> Less Than Significant <u>Law Enforcement</u> Less Than Significant <u>Public School Facilities</u> Less Than Significant <u>Parks and Recreation</u> Less Than Significant <u>Water and Wastewater Facilities</u> Less Than Significant with Mitigation <u>Electricity and Natural Gas</u> Less Than Significant
2) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.	Less Than Significant
3) Fail to comply with federal, state, and local statutes and regulations related to solid waste.	Less Than Significant
4) Result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.	<u>Fire Protection/Emergency Medical</u> Less Than Cumulatively Considerable <u>Law Enforcement</u> Less Than Cumulatively Considerable <u>Public School Facilities</u> Less Than Cumulatively Considerable <u>Parks and Recreation</u> Less Than Cumulatively Considerable <u>Water and Wastewater Facilities</u> Less Than Cumulatively Considerable <u>Solid Waste</u> Less Than Cumulatively Considerable <u>Electricity and Natural Gas</u> Less Than Cumulatively Considerable

3.13 PUBLIC SERVICES AND UTILITIES

3.13.4 METHODOLOGY

The impact analysis focuses on the potential for future growth resulting from the Master Plan to result in the need for the construction of public service and/or utility infrastructure.

3.13.5 PROJECT IMPACT ANALYSIS

Impacts to Fire Protection and Emergency Medical Services

Threshold Discussion 3.13.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered fire protection or emergency medical facilities, the construction of which could cause significant environmental impacts. This impact would be **less than significant**. (Threshold 1)

Although the proposed project does not include specific development proposals, it does facilitate the future development of commercial, office, hotel, civic, and residential uses, which would increase demand for fire protection and emergency medical services.

As described in Section 3.12, Population, Housing, and Employment, the project site is identified in the City's General Plan as representing "a significant development opportunity" and in General Plan Policy LU-19 calling for a mixed-use project with office, civic, hotel, multi-family residential, and recreation and entertainment land uses on the site. Therefore, the increases in development currently being considered for the project site have been anticipated and accounted for through the City's planning processes.

The project site is in the existing Riverside County Fire Department (RCFD) service area, and the City works regularly with the RCFD to coordinate development with any necessary fire protection facilities, infrastructure, etc., to serve anticipated or proposed growth.

The RCFD's average response time goal is 7 minutes throughout urbanized areas of the county, such as Eastvale. In addition RCFD standards hold that urban development should be located no more than 3 miles from a County fire station. RCFD Station 27 is located at 7067 Hamner Avenue, approximately 1 mile from the Master Plan area. Station 27 opened in 2011, in part to meet the demand from growth anticipated in the city. Future development within the Master Plan area would be served within the standard response time by the existing Station 27 and without the need for additional fire stations.

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 the shared use of specialized equipment and personnel between neighboring communities.

Future development within the Master Plan area would be required to comply with General Plan Policy S-10, which requires all new construction to meet minimum standards for fire safety as defined in the City's Building and Fire Codes, based on building type, design, occupancy, and use. In addition, as part of the City's Development Impact Fee program, the City will collect fees from new development to mitigate any impact the development projects have on providers' ability to provide a public service, including fire protection services.

Therefore, this impact is considered **less than significant**.

Require New or Expanded Law Enforcement Facilities

Threshold Discussion 3.13.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts. This impact would be **less than significant**. (Threshold 1)

As discussed under Impact 3.13.1, the proposed project does not include specific development proposals but does facilitate the future development of commercial, office, hotel, civic, and residential uses within the Master Plan area, which would increase the demand for law enforcement services. However, the increases in development currently being considered for the project site have been anticipated and accounted for through the City's planning processes (General Plan Policy LU-19).

The City of Eastvale contracts with the Riverside County Sheriff's Department (RCSD) for law enforcement services and the project site is within the existing service area boundaries; the RCSD police staff in Eastvale is called the Eastvale Police Department. The City works regularly with the Eastvale Police Department to coordinate development with any necessary law enforcement facilities, infrastructure, etc., to serve anticipated or proposed growth.

As discussed in Subsection 2.1, Existing Setting, the City of Eastvale is served by deputies of the RCSD Jurupa Valley Station. Basic police services under the City's contract with the County of Riverside 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. The Jurupa Valley Station is located a short distance from the Master Plan area and would be able to respond to calls for service. It is anticipated that any need for additional sworn officers resulting from implementation of the project could be met by adding staff to the existing Jurupa Valley Station, without the need to construct new facilities. The Master Plan allows for the development of a Civic Center, which could include office/desk space for additional law enforcement staff. This new staff would be funded via the General Fund.

Furthermore, as future development plans and/or projects are proposed within the Master Plan area, they would be reviewed by City and RCSD staff to ensure they are designed to promote public safety and discourage crime through the use of Crime Prevention Through Environmental Design (CPTED) principles in accordance with General Plan Policies S-23 and S-24 and Action S-21.2.¹ These principles encourage the design of neighborhoods and buildings in a manner that discourages crime and promotes security and safety for people and property through natural surveillance (keeping intruders easily observable); territorial reinforcement (creating or extending the area in which users develop a sense of territorial control); natural access control (decreasing crime opportunity by denying access to crime targets and creating a perception of risk); and target hardening (features that prohibit entry or access). The incorporation of these design principles would reduce crime and thus the demand for law enforcement services.

No new or expanded law enforcement facilities would be needed to accommodate anticipated growth as a result of future development of the project.

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This impact is **less than significant**.

Require New or Expanded Public School Facilities

Threshold Discussion 3.13.3 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered public school facilities, the construction of which could cause significant environmental impacts. This is a **less than significant** impact. (Threshold 1)

As discussed under Impact 3.13.1, the proposed Master Plan does not include specific development proposals but does facilitate the future development of commercial, office, hotel, civic, and residential uses on the project site, which would generate new student enrollment at local public schools.

The project site is within the boundaries of the Corona-Norco Unified School District (CNUSD). As shown in **Table 2.1-17** in Subsection 2.1, Existing Setting, enrollment at Harada Elementary School currently exceeds campus capacity, and enrollment at both Harada Elementary and Eleanor Roosevelt High School is projected to exceed capacity in 2024.

However, according to district staff, recent attendance boundary changes approved by the CNUSD Board of Education for the 2015–16 school year considered anticipated residential development projects in Eastvale, including 1,300 units previously proposed for the Master Plan area. These changes included reducing the attendance area for Harada Elementary School to allow for the expected student enrollment increase from these projects.

According to the CNUSD, additional classrooms could be added to each of serving campus to accommodate increased enrollment (CNUSD 2015). Therefore, it is not anticipated that a new school site would be required to serve future development resulting from the project.

Furthermore, as discussed in Subsection 2.2, Regulatory Framework, the proposed project would be subject to the CNUSD residential and commercial/industrial development fees in place at the time applications are submitted for building permits to fund school construction. Under CEQA, payment of CNUSD development fees is considered to provide full mitigation for the impact of the proposed project on public schools.

Therefore, anticipated impacts to schools would be considered **less than significant**.

Require New or Expanded Parks

Threshold Discussion 3.13.4 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the deterioration of existing parks and the demand for new parks and recreational facilities, the construction of which could have impacts on the physical environment. This impact would be **less than significant**. (Threshold 1)

The City of Eastvale has adopted a standard of 5 acres of parkland per 1,000 residents. The proposed Master Plan allows for the development of community features including gathering places, parks, open spaces, and trails. The specific type, quantity, and location of these uses on the project site have not yet been determined; implementation of Stages 2 and 3 of the Staged

Development Process identified in the Leal Master Plan would include detailed plans for the first phase(s) of development (land use, circulation, and infrastructure plans) and specific development proposals.

These future development plans and projects would be required to comply with Eastvale General Plan policies intended to ensure the provision of adequate park and recreation facilities in the city. Specifically, General Plan Policy OS-6 states that new residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of 5 acres of land for parks per 1,000 residents.

Furthermore, General Plan Policy OS-2 requires the provision of recreation facilities concurrent with the development they serve, and Policy OS-3 requires new development to provide implementation strategies for the funding of both active and passive parks and recreational sites.

Therefore, it is anticipated that the demand for new parks and recreational facilities generated by the project would be met on-site. Impacts associated with the construction of new parks within the Master Plan area are assumed as part of the project and are addressed throughout this Draft EIR. Therefore, impacts would be **less than significant**.

Require New or Expanded Water and Wastewater Facilities

Threshold Discussion 3.13.5 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in an increased demand for potable water supplies and increased generation of wastewater, potentially requiring new or expanded facilities provided by the Jurupa Community Services District. This impact would be **less than significant**. (Threshold 1)

The proposed project does not include specific development plans or proposals but does facilitate the future development of commercial, office, hotel, civic, and residential uses on the project site, which would increase the demand for potable water supplies and for wastewater treatment and conveyance facilities. Both of these services are currently provided to the Master Plan area by the Jurupa Community Services District (JCSD).

Because the proposed Master Plan would allow a range of development potential and the ultimate allocation of uses will depend on market conditions and timing, any specific population projections associated with buildout would be speculative at this time. It is not possible to determine the exact future water/wastewater demand with buildout of the Master Plan area. However, as previously discussed, the transportation and air quality studies for the project assumed a "maximum-case" assumption based on buildout of land uses on the higher end of the ranges identified in the Master Plan to determine environmental impacts. Using the maximum-case buildout assumption, future development of the project would be expected to result in water use of approximately 734 acre-feet per year (AFY) and wastewater generation of approximately 470,320 gallons per day (GPD), as shown in **Tables 3.13-1** and **3.13-2** below, respectively.

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**TABLE 3.13-1
PROJECTED POTABLE WATER DEMAND**

Land Use	Total Estimated AFY*
660 multi-family homes (apartments)	171.6
1,300,000 square feet of general retail (shopping center)	440.3
460,000 square feet of general office	70.3
450 hotel rooms	37
100,000-square-foot civic center	14.8
Total	734 AFY

**Estimated AFY was based on 0.25 Floor Area Ratio applied to a water generation factor of 3.7 AFY per acre for non-residential uses and a water generation factor of 0.26 AFY per dwelling unit for residential uses. These generation factors were based on factors used in the recently approved Goodman Commerce Center's "Water Supply Assessment, Eastvale Commerce Center" (Albert A. Webb Associates 2011).*

**TABLE 3.13-2
PROJECTED POTABLE WATER DEMAND**

Land Use	Total Estimated GPD*
660 multi-family homes (apartments)	166,320
1,300,000 square feet of general retail (shopping center)	238,000
460,000 square feet of general office	38,000
450 hotel rooms	20,000
100,000-square-foot civic center	8,000
Total	470,320

** Estimated GPD was based on JCSD standard wastewater generation factor of 252 gpd per unit for residential uses and 2,000 gpd per acre for non-residential uses (JCSD 2011, p. IV-2).*

On-Site Water and Wastewater Infrastructure

Implementation of Phase 2 of the Staged Development Process as identified in the proposed Master Plan would require the preparation of a project-wide infrastructure plan that identifies existing and proposed infrastructure facilities as well as future “backbone” infrastructure capacity needs to accommodate full buildout of the Leal Master Plan, including the location and size of existing and proposed water and sewer mains to serve future development, existing and proposed easements, and the phasing of infrastructure. Section 6.3 of the proposed Master Plan suggests that water service for the project will use existing 30-inch water lines within the rights-of-way of Hamner Avenue and Limonite Avenue to serve the project area, and sewer service will connect to the existing lines in streets bordering the project (Hamner, Limonite, Cleveland/Scholar, and 58th). The construction of water and wastewater infrastructure within the Master Plan area is assumed as part of the project and addressed throughout this Draft EIR. These facilities would be required to be designed and constructed in accordance with the JCSD’s Master Plans, Rules and Regulations, Standards, Specifications, and Standard Drawings, under the direction of a civil engineer licensed in the State of California.

Off-Site Water Capacity/Infrastructure

** For a detailed discussion of the background information pertinent to the below Water Capacity discussion, see Subsection 2.1, Existing Setting and Subsection 2.2, Regulatory Framework.*

The JCSD’s Urban Water Management Plan analyzed the available supplies and water demands for the district’s service area to assess the region’s ability to satisfy demands during three scenarios: (1) a normal water year, (2) a single dry year, and (3) multiple dry years. The analysis concluded that the JCSD has adequate supplies to meet demands during normal, single dry, and multiple dry years throughout the 20-year planning period (to year 2030)(JCSD 2011, p. 86). This is primarily because, regardless of assigned production right and safe yield of the Basin, a fundamental premise of the Judgment adjudicating water rights in the Basin is that all Chino Basin water users, including the JCSD, will be allowed to pump sufficient water from the basin to meet their requirements. The Judgment does not place specific limits on the groundwater production, but rather requires the Watermaster to determine safe yield of the Basin on an annual basis and, in turn, to determine each member’s share of that safe yield (production rights) and to levy a replenishment assessment when pumping exceeds the safe yield. As such, the JCSD’s ability to produce water for new development is largely a matter of cost of the water produced from the Chino Basin rather than limitations on JCSD’s access to groundwater supply (JCSD 2011, p. 40).

Therefore, the reliability of the JCSD’s water supply, in effect, depends on the long-term hydrologic balance between total recharge and discharge in the Chino Basin, which is actively monitored by the Watermaster via a detailed program consisting of hundreds of specific actions designed to resolve Basin water supply and quality challenges, and to maintain sustainability of groundwater resources. Groundwater artificial recharge in the Chino Basin is an integral part of the Watermaster’s basin management. The Watermaster has historically recharged the Chino Basin with stormwater recharge, State Water Project (SWP) water purchased from the Metropolitan Water District of Southern California, and recycled water when pumping exceeds the basin’s safe yield. It should be noted that, while SWP water is not a consistent supply due to drought and environmental considerations, the affects of SWP delivery do not directly affect JCSD’s supplies and JCSD’s groundwater when pumped in accordance with the Judgment are not anticipated to change regardless of allotments from the SWP. This is because the Watermaster will replenish the Basin with alternate sources of supplemental water that could be

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used for replenishment or other recharge programs as documented in the *2013 Amendment to the 2010 Recharge Master Plan Update*. During the most recently available status report for the Optimum Basin Management Program (July to December 2012), no imported (SWP) water had been recharged to the Basin - approximately 3,210 acre-feet of stormwater and 4,170 acre-feet of recycled water were recharged (CBWM 2012).

According to the Watermaster's *2013 Amendment to the 2010 Recharge Master Plan Update*, given all anticipated groundwater production from the Basin, there is no need to construct additional supplemental water recharge capacity to meet future replenishment obligations through 2035 (WEI 2013). Therefore, the Chino Groundwater Basin is considered highly reliable.

Additionally, the JCSD requires that all development projects involving water and/or sewer services obtain a water/sewer availability letter. In order to obtain the water/sewer availability letter, project applicants are required to submit a letter to the JCSD requesting availability for the project, describing the type of project, and including a map showing the property requiring water and/or sewer service and any applicable fees. The JCSD then begins a plan checking process to ensure that all water and sewer systems are designed in accordance with the JCSD's Master Plans, Rules and Regulations, Standards, Specifications, and Standard Drawings, under the direction of a civil engineer licensed in the State of California. Additionally, the JCSD charges district fees and facilities charges in order to fund any off-site improvements required to provide water and/or sewer service to the site.

Drought

As noted in Subsections 2.1 and 2.2, California is currently experiencing severe drought conditions and, as a result, the Governor directed the State Water Board to implement mandatory water reductions in urban areas to reduce potable urban water usage by 25 percent statewide. Accordingly, the JCSD has adopted Ordinance 389, which replaces the mandatory water conservation program and implements policies that require the development of new or off-set water sources for new development before a will serve letter can be issued. At the time of writing of this EIR the details of how the off-set program would work are unknown; however it is anticipated that existing potable water usage for irrigation of landscaping would be replaced by water from non-potable sources. Regardless, the JCSD regulations regarding drought are considered interim but will remain in place until drought conditions are eased and it is unknown if these emergency conditions would be in effect when future development is proposed in the Master Plan area.

Off-Site Wastewater Capacity/Infrastructure

As discussed in Subsection 2.1, Existing Setting, wastewater that is generated in Eastvale, including the project site, is discharged to the Western Riverside County Regional Wastewater Authority's wastewater treatment plant (WWTP). The WWTP was designed to treat 8.0 million gallons per day (mgd) of wastewater and is upgradable to treat 32 mgd.

The JCSD has a 3.25 mgd capacity right, although the ultimate estimated flow rate from the JCSD to the plant is projected to be 5.7 mgd, based on the projections in the 2007 Master Sewer Plan Addendum. This represents an increase of 2.45 mgd and would still be below the operating capacity of 8.0 mgd.

The JCSD has a proposed project in its 20-year Capital Improvement Program to obtain additional treatment capacity at the WWTP (JCSD 2011, p. 57). As of 2007, the plant was not operating at capacity (treating approximately 5.5 mgd), and the JCSD obtaining additional

treatment capacity to accommodate growth in its service area would not necessarily result in expansion of the WWTP. Potential impacts resulting from additional treatment capacity would be subject to CEQA review if necessary.

In addition, as discussed above, future development plans and projects within the Master Plan area would obtain a water/sewer availability letter from the JCSD and pay any district fees and facilities charges in order to fund any off-site improvements required to provide water and/or sewer service to the site.

Impact Summary

Future development on the project site is within the JCSD water/wastewater service area and future on-site infrastructure would connect to the existing JCSD water and sewer system. The proposed Master Plan includes policies and requirements to ensure that water and wastewater infrastructure is developed in a coordinated way so that all phases of development will have sufficient infrastructure capacity. Furthermore, the JCSD has demonstrated capacity in its water supply and wastewater treatment systems to accommodate growth in the city, including the proposed project and future development would obtain a water/sewer availability letter from the JCSD and pay any district fees and facilities charges in order to fund any off-site improvements.

Therefore, impacts would be reduced to a **less than significant** level.

Require New or Expanded Solid Waste Facilities

Threshold Discussion 3.13.6 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs or if the project would fail to comply with solid waste regulations. This impact would be **less than significant**. (Thresholds 2 and 3)

Although the proposed Master Plan does not include specific development proposals, it does facilitate the future development of commercial, office, hotel, civic, and residential uses, which would result in increased generation of solid waste.

As discussed in Subsection 2.1, Existing Setting, Waste Management provides solid waste services to Eastvale and would provide service to the project site. Solid waste collected in northwestern Riverside County is taken to one of three sanitary landfills after being sorted at the Robert A. Nelson Transfer Station: Badlands, El Sobrante, or Lamb Canyon. The remaining capacity of these landfills is shown in **Table 3.13-3**.

As shown, each of the serving landfills has remaining capacity (over 179 million cubic yards, collectively) to serve future development resulting from the proposed project. In addition, the Lamb Canyon Landfill is currently in the design and permitting stage for its next expansion (Phase 3), which is estimated to provide capacity for an additional 30-plus years beyond the estimated closure date of 2021 (County of Riverside 2015, p. 4.17-42).

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**TABLE 3.13-3
LANDFILL CAPACITY SUMMARY**

Landfill	Remaining Permitted Capacity	Estimated Closure Date
Badlands Sanitary Landfill	14,730,025 cubic yards	2024
El Sobrante Landfill	145,530,000 tons	2045
Lamb Canyon Sanitary Landfill	18,955,000 cubic yards	2021

Source: CalRecycle 2015

In addition, future development within the Master Plan area would be subject to compliance with the City's approved Source Reduction and Recycling Element (SRRE), which identifies the programs and plans for meeting the 50 percent state diversion mandate intended to divert more solid waste from landfills. The SRRE includes a requirement for enclosures/adequate space for and screening of recycling containers at businesses and multi-family dwellings. Furthermore, all future development with commercial accounts generating more than 4 yards per week of solid waste and multi-family complexes with five units or more would be required to have a recycling program in place consistent with the mandatory commercial and multi-family recycling requirements of Assembly Bill 341.

Because there is adequate capacity at existing landfills to serve future development resulting from implementation of the Master Plan, and future development would be required to meet local and state recycling requirements to further reduce demands on area landfills, this impact would be **less than significant**.

Require New or Expanded Electrical or Natural Gas Infrastructure

Threshold Discussion 3.13.7 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project would result in the need for new or physically altered electrical or natural gas facilities, the construction of which could cause significant environmental impacts. This impact would be **less than significant**. (Threshold 1)

As discussed under Impact 3.13.1, the proposed project does not include specific development proposals but does facilitate the future development of commercial, office, hotel, civic, and residential uses on the project site, which would increase the demand for electrical and natural gas services.

Southern California Edison (SCE) currently provides electrical service to the Master Plan area and Southern California Gas Company provides natural gas service; properties surrounding the project site have already been developed and are served by existing SCE and Gas Company infrastructure. Per discussions with SCE staff, implementation of the proposed project would not be expected to require the construction of any off-site transmission or distribution infrastructure (Ditta 2015).

While the Southern California Gas company has not confirmed whether additional off-site transmission or distribution infrastructure would be required, it is assumed that, given the relatively small size of the project site within the Gas Company service area and the fact that the project represents infill development that has been anticipated and accounted for through the City's planning processes (General Plan Policy LU-19), none would be required. Impacts associated with construction of new utility infrastructure within Master Plan area are considered part of the

project and are addressed throughout this Draft EIR. In addition, all future development would be required to meet California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings as codified in Title 24, Part 6 of the California Code of Regulations (see Subsection 2.2, Regulatory Framework). The standards focus on several key areas to improve the energy efficiency of newly constructed buildings and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations.

Therefore, this impact would be **less than significant**.

3.13.6 CUMULATIVE IMPACT ANALYSIS

Cumulative Impacts to Fire Protection and Emergency Medical Services

Threshold Discussion 3.13.8 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered fire protection and emergency medical facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The cumulative setting for fire protection and emergency medical services includes the service area boundaries of the RCFD and the surrounding areas that give and receive mutual aid with the RCFD. Cumulative development, including all existing, planned, proposed, approved, and reasonably foreseeable development in the RCFD service area, would increase demand for fire protection and emergency medical services.

As previously discussed, the RCFD operates under a Regional Fire Protection Program, allowing active support across geographic boundaries and the shared use of specialized equipment and personnel between neighboring communities. This would reduce the need for increased facilities in the cumulative setting.

In addition, urban growth in the region would result in increased property tax revenue as well as developer impact fees to fund expansion of services and construction of new fire stations as needed to accommodate such growth. The construction of these facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review.

Furthermore, as described in Impact 3.13.1, future development in the Master Plan area has been anticipated and accounted for through the City's planning processes. Such development would be in the RCFD service area to be served by the existing Station 27 within standard response times without the need for additional fire stations or facilities.

Therefore, the project's contribution to cumulative impacts would be **less than cumulatively considerable**.

Cumulative Impacts to Law Enforcement Services

Threshold Discussion 3.13.9 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically

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altered fire protection and emergency medical facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The cumulative setting for law enforcement services includes the service area boundaries of the Jurupa Valley Sheriff's Station, which provides services in Eastvale, Norco, Jurupa Valley, and the surrounding unincorporated areas. Cumulative development within the RCSD's service area, including all existing, planned, proposed, approved, and reasonably foreseeable development, would increase demand for law enforcement services.

However, urban growth in the region would also result in increased property tax revenue as well as developer impact fees to fund expansion of services and construction of new police stations as needed to accommodate such growth. The construction of these facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review.

Furthermore, as described above, future development in the Master Plan area has been anticipated and accounted for through the City's planning processes. Such development would be in the RCSD service area to be served by the existing Jurupa Valley Sheriff's Station without the need for additional facilities. The Master Plan allows for the development of a Civic Center, which could include office/desk space for additional law enforcement staff. This new staff would be funded via the General Fund. Therefore, the project's contribution to cumulative impacts would be **less than cumulatively considerable**.

Cumulative Impacts to Public Schools

Threshold Discussion 3.13.10 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered public school facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The cumulative setting for public schools includes the entire Corona-Norco Unified School District attendance boundaries. The cumulative analysis includes all existing, planned, proposed, approved, and reasonably foreseeable development within these boundaries.

As described under Impact 3.13.3, the CNUSD anticipates future residential growth within its service area and is taking measures to ensure adequate school capacity is available to address this growth. Although some schools in the district currently exceed or are projected to exceed capacities, these campuses have available space to accommodate additional classrooms to increase overall capacity. The district routinely changes attendance boundaries as necessary to balance changes in attendance levels. Furthermore, new development projects are subject to development impact fees, which are used to fund school expansion projects and new school construction. Therefore, the project's contribution to this impact would be **less than cumulatively considerable**.

Cumulative Park and Recreation Impacts

Threshold Discussion 3.13.11 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically

altered park and recreation facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The cumulative setting for parks and recreation consists of the JCSD and JARPD service area boundary. Cumulative growth, including existing, planned, proposed, approved, and reasonably foreseeable development, in the cumulative setting would increase demand for parks and recreational facilities, thus resulting in increased deterioration of existing facilities and the need for additional facilities.

Future development plans and projects would be required to mitigate this need through the dedication of land for future park development, on-site construction of new parks, or payment of in-lieu fees to fund the acquisition of land and construction of new parks elsewhere in the city. The construction of new park facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review.

Furthermore, the policies included in the General Plan support continued cooperation with the JCSD and other agencies (such as the 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. To that end, future development projects would be required to pay development impact fees for park facilities in order to fund the development and maintenance of Eastvale parks and community use facilities to the extent needed as a result of new development.

Finally, as discussed under Impact 3.13.4, it is anticipated that the demand for new parks and recreational facilities generated by the project would be met on-site. Impacts associated with the construction of new parks within the Master Plan area are assumed as part of the project and are addressed throughout this Draft EIR.

Therefore, the project's contribution to this cumulative impact would be **less than cumulatively considerable**.

Cumulative Water Supply and Wastewater Treatment Impacts

Threshold Discussion 3.13.12 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered water supply and wastewater treatment facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The cumulative setting for water and wastewater services consists of the JCSD's service area boundary. Cumulative growth, including existing, planned, proposed, approved, and reasonably foreseeable development, in the cumulative setting would increase demand for potable water supplies and wastewater treatment services.

As discussed under Impact 3.13.5, the JCSD has demonstrated capacity in its water supply and wastewater treatment systems to accommodate growth in the city, including the proposed project. The JCSD Urban Water Management Plan determined that the district would have sufficient water supplies to serve its projected demands through 2030 under normal water year, single dry year, and multiple dry year conditions. Additionally, the JCSD has a proposed project

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in its 20-year Capital Improvement Program to obtain additional treatment capacity at the wastewater treatment plant.

All future development in the district would be required to provide on-site improvements and pay any district fees and facilities charges in order to fund any off-site improvements. Therefore, the project's contribution to this cumulative impact would be **less than cumulatively considerable**.

Cumulative Solid Waste Impacts

Threshold Discussion 3.13.13 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered solid waste facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

The Riverside County Waste Management Department (RCWMD) is responsible for the efficient and effective landfill disposal of all nonhazardous waste in Riverside County. To accomplish this, the RCWMD operates the Badlands and Lamb Canyon landfills that would serve the project area and has a contract agreement for waste disposal at the private El Sobrante Landfill.

The RCWMD also operates the remaining four active landfills in the county and oversees several transfer station leases, as well as a number of recycling and other special waste diversion programs. In general, waste originating anywhere in Riverside County may be accepted for disposal at any of the landfill sites in the county.

Therefore, the cumulative setting for solid waste impacts consists of Riverside County, and any existing, planned, proposed, approved, and reasonably foreseeable development could contribute to cumulative impacts.

As part of its long-range planning and management activities, the RCWMD ensures that Riverside County has a minimum of 15 years of capacity, at any time, for future landfill disposal. The 15-year projection of disposal capacity is prepared each year by as part of the annual reporting requirements for the Countywide Integrated Waste Management Plan (CIWMP). The most recent 15-year projection submitted to the State Integrated Waste Management Board by the RCWMD indicates that no additional capacity is needed to dispose of countywide waste through 2024, with a remaining disposal capacity of 28,561,626 tons in the year 2024 (County of Riverside 2015, p. 4.17-42).

Therefore, RCWMD landfills would have sufficient capacity to serve growth in the county. The proposed project would not require expansion or the construction of new landfills. The project's contribution to this impact would be **less than cumulatively considerable**.

Cumulative Electric and Natural Gas Impacts

Threshold Discussion 3.13.14 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered electric and natural gas facilities. This impact would be **less than cumulatively considerable**. (Threshold 4)

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The cumulative setting for electricity and natural gas services consists of the SCE and Southern California Gas Company service area boundaries. Cumulative growth, including existing, planned, proposed, approved, and reasonably foreseeable development, in the cumulative setting would increase demand for electricity and natural gas services. When necessary, new utility infrastructure would be approved and constructed, and any resulting adverse impacts to the physical environment would be subject to CEQA review. As discussed above, implementation of the project is not expected to result in the need for additional off-site infrastructure and all future development would be required to meet California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings as codified in Title 24, Part 6 of the California Code of Regulations (see Subsection 2.2, Regulatory Framework).

Therefore, the project's contribution to this cumulative impact would be **less than cumulatively considerable**.

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4.0 CUMULATIVE IMPACTS

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.

4.0 CUMULATIVE IMPACTS

4.2 CUMULATIVE SETTING

In general, the cumulative setting conditions considered in this Draft EIR are based on the following:

- **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 4.0-1**. 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 Leal Master 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 in 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 addition, each environmental issue area evaluated in the Draft EIR identifies considerations applicable to its own cumulative setting where appropriate.

**TABLE 5.0-1
DEVELOPMENT PROJECTS IN EASTVALE REGION**

Projects in Review			
Name	Location	Land Use	Quantity
Eastvale Marketplace	Northeast corner Sumner and Limonite Avenue, Eastvale	Grocery	30,896 TSF
		Retail A	8,436 TSF
		Retail B	12,000 TSF
		Bank	3,000 TSF
		Pad 1	3,500 TSF
		Pad 2	3,500 TSF
		Tire Store	10,140 TSF
Name	Location	Land Use	Quantity
Vantage Point Church	8500 Archibald Avenue, Eastvale	Worship	40,000 TSF
		Education	7,600 TSF
		Education Admin.	14,500 TSF
Name	Location	Land Use	Quantity
LBA Industrial development	Southwest of I-15 and Cantu-Galleano Road, Eastvale (APNs 156-050-025, 156-050-026, 156-020-027)	Industrial	546 TSF
Name	Location	Land Use	Quantity
Walmart – Eastvale Crossings	Southeast corner of Limonite and Archibald (APNs 144-030-028, -012, -014)	Retail	177,000 TSF
Name	Location	Land Use	Quantity
Goodman Commerce Center	NE corner of Bellegrave/Hamner	Professional Offices, Light Industrial, and Light Assembly	8 Buildings, 191,356 TSF
Name	Location	Land Use	Quantity
The Ranch – Specific Plan Amendment		Industrial Buildings	985,000 TSF
Moons Site	(APNs 144-010-008-0, 144-101-013-4)		

4.0 CUMULATIVE IMPACTS

Rodriguez Site	(APN 144-010-009-1)		
Recently Approved Day Care			
Name	Location	Land Use	Quantity
Large Family Day Care (Ling Family Day Care)		Day Care	14 Students
Name	Location	Land Use	Quantity
Large Family Day Care (Eaton Family Day Care)		Day Care	14 Students
Name	Location	Land Use	Quantity
Large Family Day Care (Itsy Bitsy Depot)		Day Care	14 Students
Recently Approved			
Name	Location	Land Use	Quantity
99 Cents Only Store	Northwest corner of Hamner Avenue and Schleisman Road	Retail	19.104 TSF
Name	Location	Land Use	Quantity
Stratham Homes – Sendero, Planned Residential Development	Northwest corner of Limonite and Harrison (APN 164-010-017)	Residential	323 Lots, 44 Acres
Name	Location	Land Use	Quantity
Nexus Residential by William Lyons Homes		Condos/ Townhomes	220 DU
Name	Location	Land Use	Quantity
Blaze Pizza (MDP)	12523 Limonite Avenue, Suite 495, in the Eastvale Gateway north shopping center (APN 160-230-022)	Restaurant	600 TSF
Name	Location	Land Use	Quantity
Lennar PRD Mill Creek Crossing TR29997		Residential	122 DU

Under Construction			
Name	Location	Land Use	Quantity
The Lodge Residential Development by KB (TR31252)		Residential	205 DU
Name	Location	Land Use	Quantity
Pacific Grill and Fish	12303 Limonite Avenue	Outdoor Patio	400 TSF
Name	Location	Land Use	Quantity
Panera Bread with Drive-Through	Eastvale Gateway South (Shops 2)	Restaurant	8,140 TSF
Name	Location	Land Use	Quantity
Bank of America	Pad A of Marketplace at Enclave Shopping Center	Bank	3,042 TSF
Foreseeable Projects			
Name	Location	Land Use	Quantity
Catholic Church	14295 Chandler Street (APNs 144-121-005, 144-130-008, 144-130-009, and 144-130-010)	Sanctuary, Office/Social Hall	1,200 Seats, 16,000 TSF, 10 Classrooms, 21,811 TSF
Name	Location	Land Use	Quantity
Asset Solutions Group – Residential Development	Hamner and Schleisman Road (Polopolus Property); Hamner Avenue and east of existing A Street (APNs 152-060-002 and 152-060-003)	Residential	125 Homes
Name	Location	Land Use	Quantity
Industrial development	Southeast corner of Hamner and Riverside	Industrial	115,452 and 41,026 TSF
Complete Projects			
Name	Location	Land Use	Quantity
Tio's Mexican Restaurant		Restaurant	2,441 TSF
Name	Location	Land Use	Quantity
Lennar – Estancia, Planned Residential Development Subdivision	South of Citrus Street, west of Scholar Way (APNs 152-040-040, 152-040-026, 152-030-006)	Residential	53.2 Acres

4.0 CUMULATIVE IMPACTS

Name	Location	Land Use	Quantity
Eastvale Shopping Center		Free-Standing Discount Superstore	192,000 TSF
		Specialty Retail	9,200 TSF
		Fast-Food Without Drive-Through	7,200 TSF
		Coffee/Donut Shop with Drive-Through	2,000 TSF
		Gas Station w/convenience store and car wash	
		Pad "A" Panda, Yogurt	3,480 TSF
		Walgreens	14,700 TSF
		Pad "B" Taco Bell	3,838 TSF
		Pad "C" McDonalds	2,806 TSF
		Shop 1 (Ret/Food)	8,132 TSF
		Shop 2 (Ret/Food)	7,875 TSF
		Gas Station	3,000 TSF
		24-Hour Gym	44,010 TSF
		Medical Office Building	69,562 TSF
		Theater	53,563 TSF
		Shop 7	6,676 TSF
		Shop 8	8,727 TSF
Pad "F"	8,638 TSF		
Pad "D"	6,875 TSF		
Pad "E"	5,300 TSF		
Pad "C"	6,000 TSF		

	Bank	4,700 TSF
	Pad "A"	3,129 TSF
	Shop 3	8,529 TSF
	Shop 2	13,296 TSF
	Vons	54,150 TSF
	Shop 4	14,212 TSF
	Chase Bank	5,000 TSF
	Shop 1	12,094 TSF
	Tutor Time	11, 289 TSF
	Home Depot	114,657 TSF
	Target	123,735 TSF
	Major Dept. C	39,309 TSF
	Major Dept. D	33,892 TSF
	Major Dept. E	27,967 TSF
	Major Dept. F	11,045 TSF
	Major Dept. H	20,480 TSF
	Major Dept. I	88,895 TSF
Major Dept. J	31,000 TSF	
Pad "G"	6,160 TSF	

*TSF = 1,000 square feet of gross floor area; DU = dwelling unit

Source: City of Eastvale 2015

4.0 CUMULATIVE IMPACTS

4.3 CUMULATIVE IMPACTS ANALYSIS SUMMARY

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 summarized 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 full discussion of specific cumulative impacts for each environmental issue area is identified in the technical sections of Sections 3.1 through 3.13.

LAND USE

Threshold Discussion 3.1.3 The project would be considered to have a cumulatively considerable land use impact if it would result in future land use changes or intensification of development of other sites or be inconsistent with the Eastvale General Plan that expresses the long-term vision for the city and for this site specifically. Impacts would be **less than cumulatively considerable**.

Because the land surrounding the property is already developed with residential and commercial uses, it is unlikely that the proposed project will result in future land use changes or intensification of development on other sites. Impacts to land use are anticipated to be confined to the project site. The proposed project is consistent with the Eastvale General Plan that expresses the long-term vision for the city and for this site specifically, and the project would not change the type or intensity of land uses in the project area or the cumulative setting. This impact is considered **less than cumulatively considerable**.

TRANSPORTATION AND TRAFFIC

Threshold Discussion 3.2.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to cumulative traffic volumes in the region, resulting in significant impacts to level of service and degradation of traffic operations. This is considered a **cumulatively considerable** impact.

Limonite Avenue: Archibald Avenue to Harrison Avenue; Harrison Avenue to Scholar Way; Scholar Way to Hamner Avenue; and Hamner Avenue to I-15

The transportation impact assessment (TIA) determined that, in order to mitigate the cumulative impacts to these five segments, Limonite Avenue would need to be widened beyond six lanes, which would be inconsistent with the City's General Plan. Therefore, widening the roadway to operate at level of service (LOS) C under cumulative conditions is not feasible. The planned widening of Limonite Avenue to six lanes via the Riverside County Transportation Uniform Mitigation Fee (TUMF) program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would mitigate this congestion to the greatest extent feasible. Furthermore, City of Eastvale General Plan Policy C-3 states that cumulative and indirect traffic impacts of development may be mitigated through

the payment of impact mitigation fees. However, the projected level of service would still conflict with the City's performance standard for these roadway segments and this impact would remain **cumulatively considerable** and **significant and unavoidable**.

Limonite Avenue: I-15 Ramps to Wineville Avenue

The TIA determined that, in order to mitigate this cumulative impact, this segment of Limonite Avenue would need to be widened to six lanes. Although the widening of Limonite Avenue is a TUMF-designated improvement, this roadway segment is not included and is identified in the 2015 Northwest TUMF Zone Transportation Improvement Program as having an ultimate width of four lanes. Additionally, this roadway segment is outside of Eastvale. Neither the City nor any developer can guarantee implementation of any mitigation measure to widen the roadway segment. As such, the project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

Hamner Avenue: Limonite Avenue to Bellegrave Avenue

The TIA determined that, in order to mitigate this impact, Hamner Avenue would need to be widened beyond the six lanes that are planned for in the City's General Plan (Table C-1 and Figure C-1 of Chapter 4, Circulation and Infrastructure). Therefore, widening the roadway to operate at LOS C under cumulative conditions is not feasible. Mitigation measure **MM 3.2.1c** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be responsible for widening Hamner Avenue to six lanes. Mitigation measure **MM 3.2.1b** requires that future development projects prepare focused traffic studies which would address site- and project-specific traffic impacts. However, project traffic volumes would still contribute to traffic operations on Hamner Avenue exceeding the City's level of service thresholds under cumulative conditions. As such, the project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

I-15: South of Limonite; North of SR 60

As discussed in Subsection 2.2, Regulatory Framework, the Riverside County Transportation Commission (RCTC) has programmed the addition of one lane in each direction of Interstate 15 (I-15) from State Route (SR) 60 to the San Diego County line as a 2009–2039 Measure A Programmed Project. However, the TIA determined that, in order to mitigate the cumulative impacts to these two segments of I-15, the project would be responsible for additional freeway capacity beyond that already planned. Additionally, improvements to the freeway segments are outside the City's jurisdiction. As such, neither the City nor any developer can guarantee implementation of necessary improvements to increase freeway capacity. This impact would be considered **cumulatively considerable** and **significant and unavoidable**.

Cantu-Galleano Ranch Road: Between the I-15 Ramps and Hamner Avenue

The TIA determined that, in order to mitigate this impact, Cantu-Galleano Ranch Road would need to be widened to six lanes. Widening this roadway would be funded via the City's development impact fee program as discussed in Subsection 2.2, Regulatory Framework. Future development projects would be required to pay development impact fees and, as such, would be responsible for a fair-share contribution toward widening this segment from four lanes to six lanes. This improvement would ensure that Cantu-Galleano Ranch Road would have sufficient capacity under cumulative conditions to accommodate the projected traffic volume and meet performance standards, thus reducing this impact to **less than cumulatively considerable**.

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AIR QUALITY

Threshold Discussion 3.3.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, in combination with existing, approved, proposed, and reasonably foreseeable development in the South Coast Air Basin, could significantly contribute to cumulative increases in emissions of criteria air pollutants that could contribute to future concentrations of pollutants for which the region is currently designated nonattainment. The impact would be considered **cumulatively considerable**.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable. The proposed project would be consistent with the Air Quality Management Plan, which is intended to bring the South Coast Air Basin into attainment for all criteria pollutants. However, as evaluated in Section 3.3, Air Quality, the project could potentially exceed the construction standards, and the project will exceed the operational standards at buildout of the Master Plan. As such, impacts would be **cumulatively considerable and significant and unavoidable**.

GREENHOUSE GASES AND CLIMATE CHANGE

Threshold Discussion 3.4.1 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, under year 2020 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is **less than cumulatively considerable**.

The greenhouse gas (GHG) emissions from buildout of the Leal Master Plan under year 2020 conditions are projected to result in 77,375 metric tons of carbon dioxide equivalent (CO₂e) per year. As projected, emissions would be reduced by 26.7 percent from business-as-usual (BAU) emissions, which is greater than the 21.7 percent threshold, so the Master Plan is considered consistent with the State of California's ability to meet its GHG reduction goals under Assembly Bill (AB) 32. This impact is **less than cumulatively considerable**.

Threshold Discussion 3.4.2 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, under year 2035 conditions, could result in greenhouse gas emissions that would further contribute to significant impacts on the environment. This impact is **less than cumulatively considerable**.

Emissions modeling estimates a 4 percent reduction in GHG emissions associated with Master Plan buildout under 2020 conditions and under 2035 conditions, entirely as the result of less-polluting vehicles in the future. This is below the 50 percent reduction target.

The EIR prepared for the Eastvale General Plan (SCH#2011111061) identified 919,872 metric tons of GHG emissions generated annually as a result of full city buildout, which was projected to potentially occur around the year 2032. This projection of GHG emissions attributable to all land uses in the city included a generalized land use assumption of office, civic, hotel, and multi-family residential development on the project site. Therefore, the potential land use mix proposed by the Master Plan was considered in the City General Plan (Eastvale 2012). Since adoption of the City General Plan, Eastvale has voluntarily become a member jurisdiction participating in the Western Riverside Council of Governments' (WRCOG) Subregional Climate Action Plan (CAP) process, which was adopted in June 2014 and establishes policies and priorities to enable member jurisdictions to employ strategies that successfully reduce GHG emissions. The CAP addresses overall GHG emissions in western Riverside County by preparing GHG inventories and forecasts, identifying subregional GHG reduction targets of 15 percent below current emissions by 2020 and 49 percent below current emissions by 2035. Therefore, as a result of City efforts, GHG emissions attributable to the community as a whole are projected to continue to decrease beyond 2020.

Furthermore, the proposed Master Plan itself would reduce the environmental impact (including GHG emissions) of development on the site 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.

This impact is **less than cumulatively considerable**.

Threshold Discussion 3.4.3 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan could conflict with the goals of the Western Riverside Council of Governments Subregional Climate Action Plan. This impact is **less than cumulatively considerable**.

The WRCOG (2014) Subregional CAP establishes a community-wide emissions reduction target of 15 percent below 2010 by the year 2020, following guidance from the California Air Resources Board (CARB) and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined that this approach is consistent with the statewide AB 32 goal of reducing emissions to 1990 levels by the year 2020. No aspect of the proposed project would conflict with these goals of the WRCOG (2014) Subregional CAP, and the proposed project supports the intent of the CAP measures. In addition, all future development projects in the Master Plan area will be required to submit a pedestrian and bicycle access and circulation plan along with the submittal of the vehicular circulation plan. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact is **less than cumulatively considerable**.

AESTHETICS, LIGHT, AND GLARE

Threshold Discussion 3.5.5 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, in combination with other reasonably foreseeable development projects in the region, would contribute to the alteration of the visual character of the region, impacts to scenic vistas, and increased glare/lighting. This impact is considered **potentially significant**.

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Development under the proposed Master Plan would contribute to the ongoing trend of alteration of the area's visual character by converting open space and rural uses to urban development. This development would also contribute to changes in nighttime lighting and illumination levels in the region. The proposed Master Plan establishes specific parameters for the design and quality of the project site, which must be met by any future development. In addition, future projects would be required to be consistent with the City's outdoor lighting requirements and mitigation measure **MM 3.5.1** requires future development plans and/or projects to utilize nonglare glass in all nonresidential buildings to minimize and reduce impacts from glare. Compliance with the provisions of the Master Plan, the City's Municipal Code, and the mitigation measure would substantially reduce any contribution to significant cumulative impacts associated with alteration of the visual character of the region and increased glare/lighting in the region. Therefore, this impact would be reduced to a **less than cumulatively considerable** level.

NOISE

Threshold Discussion 3.6.6 The project would be considered to have a cumulatively considerable impact if, under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. This is a **cumulatively considerable** impact.

The addition of traffic from future development of the Master Plan area to area roadways would result in a significant increase in traffic noise levels at existing land uses in the area. Under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. Although predicted increases in traffic noise levels for future cumulative conditions would also be attributable to projected increases in development in the surrounding community, the project's contribution to future cumulative traffic noise levels along area roadway segments would still be considered significant. Full mitigation of transportation-related noise impacts on existing uses could be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. For example, commonly employed traffic noise mitigation measures, such as sound barriers, may not be feasible at some land uses, particularly existing residential land uses that front major roadways. As a result, this impact is considered **cumulatively considerable** and **significant and unavoidable**.

BIOLOGICAL RESOURCES

Threshold Discussion 3.7.6 Future development anticipated as a result of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the immediate area of the proposed project, will result in the conversion of habitat and impact biological resources. This impact is considered **less than cumulatively considerable**.

Project compliance with the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) fully mitigates for impacts on covered species and ensures large segments of natural communities in western Riverside County will be preserved. Adherence to the standards and

conditions of the MSHCP, and implementation of mitigation measure **MM 3.7.1**, ensures that impacts to special-status species and their habitats are minimized. Finally, implementation of mitigation measures **MM 3.7.2** and **MM 3.7.3** will ensure impacts to jurisdictional features are minimized. Though future development resulting from the proposed project will continue the urbanization of the area, participation in and implementation of the MSHCP will effectively reduce the project's contribution to cumulative impacts to a **less than cumulatively considerable** level.

CULTURAL RESOURCES

Threshold Discussion 3.8.3 The project would be considered to have a cumulatively considerable impact if approval of the proposed Master Plan could contribute to the cumulative disturbance of cultural resources. This impact would be **potentially cumulatively considerable**.

Although there are currently no known significant cultural resources within the Master Plan area, the area has not yet been surveyed for cultural resources, so it is possible that some resources may be discovered to exist. In addition, ground-disturbing activities associated with construction within the Master Plan area could uncover previously unknown cultural resources and/or human remains, and the potential loss or degradation of these resources might contribute to the cumulative loss of cultural resources in Eastvale and Riverside County. Without mitigation, this contribution could be considerable when combined with other past, present, and foreseeable development in the region. Adherence to mitigation measures **MM 3.8.1** through **MM 3.8.3** as included in the Leal Master Plan Mitigation Program would ensure that future development plans and/or projects would not adversely affect or result in the damage of potential or unknown cultural resources and would reduce the proposed Master Plan's contribution to cumulative impacts to prehistoric resources, historic resources, and human remains to a **less than cumulatively considerable** level.

Threshold Discussion 3.8.4 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to the cumulative disturbance of paleontological resources (i.e., fossils and fossil formations). This would be a **potentially cumulatively considerable** impact.

The Master Plan area has never been studied for the presence of fossils, so it is not known whether these are present on the site. However, Eastvale is considered to be sensitive for paleontological resources. As a result, future ground-disturbing activities within the project area could potentially uncover previously unknown fossil resources that might contribute to the cumulative loss of paleontological resources in Eastvale and Riverside County. Without mitigation, this loss of paleontologic resources could be considerable when combined with other past, present, and foreseeable development in the region. Adherence to mitigation measure **MM 3.8.4** as included in the Leal Master Plan Mitigation Program would ensure that future development plans and/or projects would not adversely affect or result in the damage of potential or unknown paleontological resources and would reduce the proposed project's contribution to paleontological resources to a **less than cumulatively considerable** level.

GEOLOGY AND SOILS

Threshold Discussion 3.9.9 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable

4.0 CUMULATIVE IMPACTS

development in Eastvale, would not contribute to cumulative geologic and soils impacts. The proposed project's incremental contribution would be **less than cumulatively considerable**.

All new development in Eastvale would be required to comply with the California Building Standards Code, which mandates stringent earthquake-resistant design parameters and common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of 1 or more acres, or any project involving less than 1 acre that is part of a larger development plan and includes clearing, grading, or excavation, is subject to National Pollutant Discharge Elimination System (NPDES) provisions. NPDES requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development by requiring an approved stormwater pollution prevention plan (SWPPP) that provides a schedule for the implementation and maintenance of erosion control measures and a description of erosion control practices, including appropriate design details and a time schedule.

Further, implementation of NPDES requirements and CBSC standards would reduce cumulative impacts associated with geology and soils throughout the region. Furthermore, site-specific review, including geotechnical reports, required by the City of Eastvale would reduce the Leal Master Plan's contribution to cumulative impacts to **less than cumulatively considerable**.

Threshold Discussion 3.9.10 Implementation of the proposed Master Plan, along with regional and statewide growth, would result in a contribution to the conversion of important farmland. However, this is a **less than cumulatively considerable** impact.

Future development resulting from the project will convert Prime Farmland; however, the City's General Plan and General Plan EIR determined that conversion of agricultural land was a significant and unavoidable impact of land development within the Eastvale city limits. Because this property was designated for development, the conversion of agricultural uses is consistent with the adopted General Plan and General Plan EIR. Since the conversion of agricultural land to urban uses is consistent with the City's General Plan (Policy AQ-39), associated impacts are **less than cumulatively considerable**.

HAZARDS AND HAZARDOUS MATERIALS

Threshold Discussion 3.10.7 Implementation of the proposed Master Plan, in addition to cumulative development associated with the proposed project, would not result in cumulative hazardous risk impacts. Therefore, impacts are **less than cumulatively considerable**.

Hazards and hazardous materials impacts associated with the project would be site-specific and would not contribute to cumulative hazardous impacts. Cumulative development in the region is not anticipated to result in significant hazards or hazardous materials impacts. The proposed project will not combine with any planned growth in the area to form a hazards impact greater or more significant than the project impact alone. Therefore, the cumulative hazards impacts are considered **less than cumulatively considerable**.

HYDROLOGY AND WATER QUALITY

Threshold Discussion 3.11.4 The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development in the Santa Ana River watershed, could alter drainage conditions, rates, volumes, and water quality, which could result in potential erosion, flooding, and water quality impacts in the overall watershed. This is considered a **less than cumulatively considerable** impact.

While the potential to degrade water quality exists, all future projects would be required to comply with the NPDES stormwater permitting program, which regulates water quality originating from construction sites. Future development on the project site would be required to prepare and submit a detailed erosion control plan for City approval prior to obtaining a grading permit. The implementation of this plan is expected to address any erosional issues associated with proposed grading and site preparation. Although future development would create new impervious surface on the property, development associated with the proposed project would result in opportunities for landscaped areas to be utilized for stormwater retention. All development is required to comply with Municipal Code Chapter 14.12, submit a SWPPP and a water quality management plan (WQMP), and adhere to policies in the City's General Plan. Compliance with these requirements would reduce impacts associated with erosion and water quality.

From an operational standpoint, the proposed project would not violate water quality standards because a WQMP would be required for all future development on the project site. Future projects must implement site design best management practices (BMPs), source control BMPs, and treatment control BMPs as identified in the water quality management plan. As such, the Master Plan, in conjunction with other planned and approved projects in the watershed, would not result in cumulatively considerable impacts to hydrology and water quality.

The proposed project's contribution to cumulative water quality, runoff, and flooding impacts is considered **less than cumulatively considerable**.

POPULATION, HOUSING, AND EMPLOYMENT

Threshold Discussion 3.12.3 The project would be considered to have a cumulatively considerable impact if it would contribute to a cumulative increase in population and housing that would induce substantial growth in Eastvale as well as in the surrounding western Riverside County region. This impact is **less than cumulatively considerable**.

Because the land surrounding the property is already developed with residential, commercial, and retail uses, and the project would not require or result in the extension of infrastructure to an undeveloped area, it is unlikely that the proposed Master Plan would result in growth or intensification of development or sprawl in the surrounding region. Furthermore, as discussed in Subsection 2.1, Existing Setting, WRCOG anticipates a growth rate of 11 percent for Eastvale and 28 percent for western Riverside County between 2020 and 2035. These growth rate forecasts are based, in part, on the City's General Plan, which anticipated development of the project site with a mixed-use project including both housing and employment-generating uses. Therefore, the Leal Master Plan would not be expected to contribute to a cumulative increase in population, housing, and employment in the surrounding region beyond that projected by WRCOG. The impact would be **less than cumulatively considerable**.

4.0 CUMULATIVE IMPACTS

PUBLIC SERVICES AND UTILITIES

Cumulative Impacts to Fire Protection and Emergency Medical Services

Threshold Discussion 3.13.8 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered fire protection and emergency medical facilities. This impact would be **less than cumulatively considerable**.

The Riverside County Fire Department (RCFD) operates under a Regional Fire Protection Program, allowing active support across geographic boundaries and the shared use of specialized equipment and personnel between neighboring communities. This would reduce the need for increased facilities in the cumulative setting. In addition, urban growth in the region would result in increased property tax revenue as well as developer impact fees to fund expansion of services and construction of new fire stations as needed to accommodate such growth. The construction of these facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review. Furthermore, future development in the Master Plan area has been anticipated and accounted for through the City's planning processes. Such development would be in the RCFD service area to be served by the existing Station 27 within standard response times without the need for additional fire stations or facilities. Therefore, the project's contribution to cumulative impacts would be **less than cumulatively considerable**.

Cumulative Impacts to Law Enforcement Services

Threshold Discussion 3.13.9 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered fire protection and emergency medical facilities. This impact would be **less than cumulatively considerable**.

Urban growth in the region would result in increased property tax revenue as well as developer impact fees to fund expansion of services and construction of new police stations as needed to accommodate such growth. The construction of these facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review. Furthermore, future development in the Master Plan area has been anticipated and accounted for through the City's planning processes. Such development would be in the Riverside County Sheriff's Department (RCSD) service area to be served by the existing Jurupa Valley Sheriff's Station without the need for additional facilities. The Master Plan allows for the development of a Civic Center, which could include office/desk space for additional law enforcement staff. This new staff would be funded via the General Fund. Therefore, the project's contribution to cumulative impacts would be **less than cumulatively considerable**.

Cumulative Impacts to Public Schools

Threshold Discussion 3.13.10 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically

altered public school facilities. This impact would be **less than cumulatively considerable**.

The Corona-Norco Unified School District (CNUSD) anticipates future residential growth within its service area and is taking measures to ensure adequate school capacity is available to address this growth. Although some schools in the district currently exceed or are projected to exceed capacities, these campuses have available space to accommodate additional classrooms to increase overall capacity. The district routinely changes attendance boundaries as necessary to balance changes in attendance levels. Furthermore, new development projects are subject to development impact fees, which are used to fund school expansion projects and new school construction. Therefore, the project's contribution to this impact would be **less than cumulatively considerable**.

Cumulative Park and Recreation Impacts

Threshold Discussion 3.13.11 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered park and recreation facilities. This impact would be **less than cumulatively considerable**.

Future development plans and projects would be required to mitigate the need for new or physically altered park and recreation facilities through the dedication of land for future park development, on-site construction of new parks, or payment of in-lieu fees to fund the acquisition of land and construction of new parks elsewhere in the city. The construction of new park facilities could result in adverse impacts to the physical environment, which would be subject to CEQA review. Furthermore, the policies included in the General Plan support continued cooperation with the Jurupa Community Services District (JCSD) and other agencies (such as the Jurupa Area Recreation and Park District [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. To that end, future development projects would be required to pay development impact fees for park facilities in order to fund the development and maintenance of Eastvale parks and community use facilities to the extent needed as a result of new development. Finally, it is anticipated that the demand for new parks and recreational facilities generated by the project would be met on-site. Impacts associated with the construction of new parks within the Master Plan area are assumed as part of the project and are addressed throughout this Draft EIR. Therefore, the project's contribution to this cumulative impact would be **less than cumulatively considerable**.

Cumulative Water Supply and Wastewater Treatment Impacts

Threshold Discussion 3.13.12 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered water supply and wastewater treatment facilities. This impact would be **less than cumulatively considerable**.

4.0 CUMULATIVE IMPACTS

The JCSD has demonstrated capacity in its water supply and wastewater treatment systems to accommodate growth in the city, including the proposed project. The JCSD Urban Water Management Plan determined that the district would have sufficient water supplies to serve its projected demands through 2030 under normal water year, single dry year, and multiple dry year conditions. Additionally, the JCSD has a proposed project in its 20-year Capital Improvement Program to obtain additional treatment capacity at the wastewater treatment plant. All future development in the district would be required to provide on-site improvements and pay any district fees and facilities charges in order to fund any off-site improvements. Therefore, the project's contribution to this cumulative impact would be less than cumulatively considerable.

Cumulative Solid Waste Impacts

Threshold Discussion 3.13.13 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered solid waste facilities. This impact would be **less than cumulatively considerable**.

As part of its long-range planning and management activities, the Riverside County Waste Management Department (RCWMD) ensures that Riverside County has a minimum of 15 years of capacity, at any time, for future landfill disposal. The 15-year projection of disposal capacity is prepared each year by as part of the annual reporting requirements for the Countywide Integrated Waste Management Plan (CIWMP). The most recent 15-year projection submitted to the State Integrated Waste Management Board by the RCWMD indicates that no additional capacity is needed to dispose of countywide waste through 2024, with a remaining disposal capacity of 28,561,626 tons in the year 2024. Therefore, RCWMD landfills would have sufficient capacity to serve growth in the county. The proposed project would not require expansion or the construction of new landfills. The project's contribution to this impact would be **less than cumulatively considerable**.

Cumulative Electric and Natural Gas Impacts

Threshold Discussion 3.13.14 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would result in a cumulatively considerable contribution to physical impacts associated with the provision of new or physically altered electric and natural gas facilities. This impact would be **less than cumulatively considerable**.

When necessary, new utility infrastructure would be approved and constructed, and any resulting adverse impacts to the physical environment would be subject to CEQA review. As discussed above, implementation of the project is not expected to result in the need for additional off-site infrastructure. Therefore, the project's contribution to this cumulative impact would be **less than cumulatively considerable**.

REFERENCES

Eastvale, City of. 2012a. *City of Eastvale General Plan*.

———. 2012b. *Eastvale General Plan, Draft Environmental Impact Report* (SCH No. 2011111061).

———. 2015. City of Eastvale Planning Department Cumulative Project List. Provided June 2015.

WRCOG (Western Riverside Council of Governments). 2014. *Subregional Climate Action Plan Final Draft*.

4.0 CUMULATIVE IMPACTS

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5.0 ALTERNATIVES

5.1 OVERVIEW

The alternatives analysis consists of the following components: an overview of California Environmental Quality Act (CEQA) requirements for alternatives analysis, descriptions of the alternatives evaluated, a comparison between the anticipated environmental effects of the alternatives and those of the proposed project, and identification of an “environmentally superior” alternative.

5.2 CEQA REQUIREMENTS FOR ALTERNATIVES

The CEQA Guidelines require that an environmental impact report (EIR) describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives but would avoid or substantially lessen one or more of the project’s significant effects (CEQA Guidelines Section 15126.6(a)).

In addition, Sections 15126.6(a) and (b) of the CEQA Guidelines require the consideration of alternatives that could reduce or eliminate any significant adverse environmental effects of the proposed project, including alternatives that may be more costly or could otherwise impede the project’s objectives. The range of alternatives considered must include those that offer substantial environmental advantages over the proposed project and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors. The CEQA Guidelines also require analysis of a “No Project” alternative and identification of the environmentally superior alternative among those analyzed.

5.3 DEVELOPMENT OF PROJECT ALTERNATIVES

This section discusses the reasoning for selecting the alternatives and summarizes the assumptions identified for the alternatives. The range of alternatives included for analysis in an EIR is governed by the “rule of reason.” The primary objective is formulating potential alternatives and choosing which ones to analyze to ensure that the selection and discussion of alternatives fosters informed decision-making and informed public participation. This is accomplished by providing sufficient information to enable readers to reach conclusions themselves about such alternatives. This approach avoids assessing an unmanageable number of alternatives or analyzing alternatives that differ too little to provide additional meaningful insights about their environmental effects. The alternatives addressed in this Draft EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the project.
- The extent to which the alternative would avoid or reduce any of the identified significant effects of the project.
- The feasibility of the alternative, taking into account site suitability and parcel sizes, and consistency with applicable public plans, policies, and regulations.
- The appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice.

The alternatives analyzed in this Draft EIR were ultimately chosen based on each alternative’s ability to feasibly attain the basic project objectives while avoiding or reducing one or more of the project’s significant effects. The analysis provides readers with adequate information to compare the effectiveness of identified mitigation or significant adverse impacts and to enable

5.0 ALTERNATIVES

readers to make decisions about the project. CEQA requires environmental impact reports to address a reasonable range of reasonable alternatives, not all potential alternatives.

PROJECT OBJECTIVES

As noted above, an EIR must describe a reasonable range of alternatives to a project that would feasibly attain the basic project objectives while avoiding or reducing one or more of the project's significant effects (CEQA Guidelines Section 15126.6(a)). In identifying the range of alternatives for analysis in this EIR, the following project objectives were considered:

- 1) Facilitate transformation of the project area into Eastvale's town center.
- 2) Encourage a mix of uses, including retail, office, civic, hotel, residential, and recreation/entertainment, that respond to market demand.
- 3) Create a large, regional "lifestyle retail" destination in Eastvale to meet the needs of patrons from the community and the region.
- 4) Implement high-quality architecture and design that creates a sense of place and enhances the aesthetic and visual quality of the neighborhood.
- 5) Design the site in an efficient fashion that perpetuates a compact, urban form of development.
- 6) Provide safe and entertaining gathering places for Eastvale residents.
- 7) Develop the site in an orderly, comprehensive, and cohesive manner that avoids the piecemeal development of the site with a mix of incompatible uses that do not relate to one another.
- 8) Expand the city's economic base by generating substantial property and sales tax revenue.
- 9) Develop a comprehensive mitigation plan that streamlines subsequent project approval allowing for efficient consideration of development proposals.

SUMMARY OF SIGNIFICANT IMPACTS

The significant environmental impacts of the project that the alternatives will seek to eliminate or reduce were determined and based on the findings contained in each technical section as evaluated in Sections 3.1 through 3.13 of this DEIR. The specific significant environmental impacts associated with the General Plan as determined in this DEIR include the following:

Transportation and Traffic

- Traffic volumes on area roadways exceeding performance standards identified in the City's General Plan (Threshold Discussion 3.2.1)
- Cumulative traffic impacts to level of service and degradation of traffic operations in the region (Threshold Discussion 3.2.7)

Air Quality

- Violate air quality standard or contribute substantially to an air quality violation - construction emissions (Threshold Discussion 3.3.1)
- Violate air quality standard or contribute substantially to an air quality violation - operational emissions (Threshold Discussion 3.3.2)
- Result in a cumulatively considerable net increase in nonattainment criteria pollutants (Threshold Discussion 3.3.7)

Noise

- Transportation-related permanent increase in ambient noise levels (Threshold Discussion 3.6.3)
- Cumulative increase in transportation-related noise levels (Threshold Discussion 3.6.6)

5.4 ALTERNATIVES DESCRIPTIONS AND ANALYSIS

DESCRIPTION OF ALTERNATIVES

Alternative 1: No Project

CEQA Guidelines Section 15126.6(e) requires that a No Project Alternative be evaluated in an EIR. The No Project analysis must discuss the circumstance under which the project does not proceed. The comparison is that of the proposed project versus what can reasonably be expected to occur on the properties should the proposed project not be approved. The analysis allows decision-makers to compare the impacts of approving the project with the impacts of not approving the project (CEQA Guidelines Section 15126.6(e)(3)(B)). However, the No Project Alternative is not intended to be a no action alternative under CEQA. Therefore, the No Project Alternative does not necessarily assume that the project site will remain in its current, mostly undeveloped state. If no action is taken on the proposed project, it is reasonable to assume that another project would be proposed at some point in the future consistent with the existing General Plan and zoning designations.

City of Eastvale General Plan Policy LU-19 identifies possible future land uses, including office, civic, hotel, multi-family residential, and recreation and entertainment land uses, on the site and this direction led to development of the proposed project. While the General Plan anticipated a master plan for the proposed project site, the No Project Alternative would likely result in development consistent with the existing General Plan land use designations, which are Business Park (BP), Medium Density Residential (MDR), and High Density Residential (HDR). Although the existing A-2 Heavy Agricultural Zone District would need to be changed to allow for future development consistent with the existing General Plan designations, and that rezoning would be a project, it is a more reasonable assumption of what would occur under the No Project Alternative than an approach that assumes the property would remain unchanged.

As such, Alternative 1 assumes that the existing City of Eastvale General Plan land use designations are the land uses for the future. Therefore, the No Project Alternative assumes that the project site would develop as shown in **Table 5.0-1**.

**TABLE 5.0-1
NO PROJECT SCENARIO BUILDOUT ASSUMPTIONS**

Land Use
564 HDR multi-family homes (apartments)
201 MDR single-family homes
1,200,000 sq. ft. of General Office uses

Alternative 2: Market Probable Scenario

As discussed in Section 2.0, Project Description, it is unlikely that the maximum-case buildout would occur on the project site. The project under the maximum-case assumption would require buildings of several stories in height, stacked parking, and a density that would be unique in Eastvale and in all but the most urban areas of Riverside County.

Alternative 2, the Market Probable Scenario, assumes a lower intensity buildout scenario that is more likely given past and current market trends, existing development in the region, and site constraints. The buildout assumptions for Alternative 2 are shown in **Table 5.0-2**. The Market Probable Scenario assumes the same types of land uses as the proposed project, but with the non-residential uses developed at a lower intensity (less square footage).

**TABLE 5.0-2
MARKET PROBABLE SCENARIO BUILDOUT ASSUMPTIONS**

Land Use
660 multi-family homes (apartments);
1,000,000 sq. ft. of general retail (shopping center);
230,000 sq. ft. of general office;
230,000 sq. ft. of medical office;
450 hotel rooms; and
100,000 sq. ft. civic center

ANALYSIS OF ALTERNATIVES

Each alternative is compared to the proposed project. The project alternatives are evaluated in less detail than those of the proposed project, and the impacts are described in terms of difference in outcome compared with implementing the proposed project. **Table 5.0-4** at the end of this section provides an at-a-glance comparison of the environmental benefits and impacts of each alternative.

Comparative Impacts of Alternative 1: No Project

Land Use

All development under the proposed project would be consistent with the City’s General Plan and Zoning Code, as well as with regional plans adopted for environmental impacts, including the Western Riverside County Multiple Species Habitat Conservation Plan, the Stephens’

Kangaroo Rat Habitat Conservation Plan, the Delhi Sands Habitat Conservation Plan, the regional Transportation Uniform Mitigation Fee, the City's Development Impact Fee, the School Impact Fee, and the City's National Pollutant Discharge Elimination (NPDES) permit. Alternative 1 assumes that the project site would be rezoned and would develop in accordance with the existing land use designations of the General Plan (BP, MDR, and HDR). Future development under Alternative 2 would also be consistent with the City's General Plan policies and Zoning Code requirements, as well as with regional plans adopted for environmental impacts. Therefore, land use impacts associated with Alternative 2 would be similar to those of the proposed project.

Transportation and Traffic

Increased vehicle trips generated by the proposed project would result in increased congestion and decreased level of service (LOS) below the City's performance standard of LOS C on three roadway segments and eight roadway segments under cumulative conditions.

Although Alternative 1 would include 105 more residential units than the proposed project, the external vehicle trips that would be generated as a result of Alternative 1 would be substantially less than the proposed project because non-residential uses would be developed at a much lower intensity (less square footage) than the proposed project, thus generating fewer traffic trips. Alternative 1 would result in 26,278 daily vehicle trips, which is 36,722 daily trips less than those assumed for the proposed project in the transportation impact assessment (TIA) prepared by Fehr and Peers (2015). This reduction in traffic volumes would substantially reduce traffic volumes in comparison to the project, resulting in less congestion and fewer traffic impacts. As such, Alternative 1 would result in fewer transportation and traffic impacts than the proposed project.

Air Quality

The air quality analysis for the proposed project identified that the majority of air pollutant emissions would come from automobiles. It is estimated that 63,000 average daily automobile trips would be generated as a result of the proposed project while Alternative 1 would only result in 26,278 daily vehicle trips, which is 36,722 daily trips less than the proposed project. The reduction of average daily automobile trips would substantially reduce air pollutant emissions compared with the proposed project. However, this reduction would not be substantial enough to reduce emission below the significance thresholds promulgated by the South Coast Air Quality Management District. (As a frame a reference, approximately 7,150 average daily trips are enough to surpass significance thresholds.) Therefore, air quality impacts would be lower than the proposed project, but would remain significant.

Climate Change

As with criteria air pollutants, the analysis for the proposed project identified that the majority of greenhouse gas (GHG) emissions would come from automobiles. As discussed above, it is estimated that Alternative 1 would result in 36,722 fewer daily trips than the proposed project. The reduction of average daily automobile trips would reduce GHG emissions when compared to the proposed project.

Aesthetics, Light, and Glare

Although the proposed project would facilitate a permanent substantial change in the existing visual character of the project site from dairy/agricultural to developed suburban uses, the

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proposed project is infill development in a developed area and the Leal Master Plan and the Eastvale Municipal Code establish specific parameters for the design and quality of the project area, which must be met by any future development. Therefore, altering the existing visual character of the site would not necessarily degrade it.

Alternative 1 would also facilitate a permanent substantial change in the existing visual character of the project site from dairy/agricultural to developed suburban uses. Future land uses under Alternative 1 would be in the same infill location as the proposed project and would also be subject to the standards included in the Eastvale Municipal Code, as well as a similar mitigation measure to reduce glare sources. However, the General Plan envisioned a long-range planning process (Master Plan) for the project site, in part, to prevent an unsatisfactory development taking the place of the high quality design and construction envisioned in the Leal Master Plan. Future development under Alternative 1 would not be subject to the specific parameters for the design and quality of the project area included in the Leal Master Plan, which sets forth desired project characteristics and the level of quality, including requirements for site design, public spaces, water features, buffers/adjacencies, screens/fences/walls, landscaping, architecture, exterior materials and colors, street furnishings, thematic features, and signage. In the absence of such parameters, Alternative 1 could result in worse visual character impacts than the proposed project.

Noise

The proposed project would result in significant noise impacts due to the increase in traffic noise in the area. Full mitigation of transportation-related noise impacts on existing uses may not be feasible, thus resulting in cumulatively considerable and significant and unavoidable impacts. As discussed above, Alternative 1 would result in 36,722 fewer daily vehicle trips than the proposed project. This would substantially reduce traffic noise on area roadways in comparison to the proposed project. Alternative 1 would reduce this significant impact of the proposed project.

Biological Resources

Future development anticipated as a result of the project could adversely affect or damage potential or unknown biological resources on the project site and contribute to the cumulative disturbance and/or loss of these resources in the cumulative setting. However, implementation of the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP) and adherence to additional mitigation measures included in the Leal Master Plan Mitigation Plan would ensure future development adequately mitigates adverse impacts and would reduce all impacts on potential/unidentified biological resources to a less than significant level. Future development under Alternative 1 would have a similar amount of ground disturbance/urban development to that of the proposed project, thus resulting in similar biological resource impacts. However, future development under Alternative 1 would be subject to similar mitigation measures, as well as to the MSHCP. Therefore, potential impacts to biological resources would be the same under Alternative 1 as under the proposed project.

Cultural Resources

Impacts to cultural resources are generally a result of the location of a project and land disturbance. Future development under Alternative 1 would have a similar amount of ground disturbance/urban development to that of the proposed project, thus resulting in similar cultural resource impacts. Mitigation measures were required to reduce the proposed project's impacts to potential or unknown cultural and paleontological resources in the Master Plan area. These

same measures would be required for any land disturbances of Alternative 1. Thus, Alternative 1 would have a similar impact to cultural resources than that of the proposed project.

Geology and Soils

Future development under the proposed project would be designed in accordance with CBC requirements that address structural seismic safety and includes design criteria for seismic loading and other geologic hazards. In addition, site specific geotechnical studies would be required (General Plan Action Item S-2.1) as part of the environmental and development review process. These and other local and state regulatory requirements would ensure that geology and soil impacts to future projects under the proposed project would be less than significant. Future development under Alternative 1 would include residential and general office development that would have similar potential geology and soil impacts to the proposed project. However, future development under Alternative 1 would be subject to the same regulatory requirements and would therefore have similar impacts related to geology and soils as the proposed project.

Hazards and Hazardous Materials

Hazardous material impacts associated with the proposed project result from the potential for the existing dairy and horse farm buildings to contain asbestos, lead paint, or polychlorinated biphenyls (PCB). Mitigation measures requiring a Phase I ESA and a Phase II ESA would ensure future development adequately mitigates adverse impacts related to these potential hazardous building materials. These same measures would be required for any future development under Alternative 1. However Alternative 1 would have more residential land uses and substantially less non-residential land uses than the proposed project. Residential land uses would have less potential for the handling and/or release of hazardous materials than non-residential uses; therefore, Alternative 1 would result in fewer hazardous materials impacts than the proposed project.

Hydrology and Water Quality

Hydrology and water quality impacts associated with the proposed project would primarily result from the introduction of impervious surfaces in the form of structures and parking lots to previously undeveloped parcels of land. Development associated with the proposed project may alter the existing drainage pattern of the site to impact stormwater runoff rates and volumes compared to existing conditions. Alternative 1 would include residential and general office development that would increase impervious surfaces and alter drainage patterns on the project site to a similar extent as the proposed project.

Compliance with Municipal Code Chapter 14.12, submittal of a SWPPP, WQMP, and adherence to policies in the City's General Plan and to General Construction Activity Stormwater Permit requirements would ensure that impacts under both the proposed project and Alternative 1 would not be significant. Overall, Alternative 1 would result in a similar intensity of hydrology and water quality impacts to the proposed project.

Population and Housing

The proposed project would facilitate growth on the project site, the growth would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan and would be consistent with the City's General Plan policies and goals intended to promote smart growth. Although Alternative 1 would include 105 more residential units than the proposed project and thus an increase in population as compared to the proposed project,

5.0 ALTERNATIVES

Alternative 2 would also be consistent with the City's General Plan and growth planned for the project site. Therefore, Alternative 2 would have a similar impact as that of the proposed project.

Public Services and Utilities

Future development anticipated as a result of the proposed project would increase demand for public services and utilities; however these services are generally in place and being provided to the Master Plan area. Implementation of the project would not result in the need for new or expanded public services or utility facilities, the construction of which could cause significant environmental impacts. Alternative 1 would also increase the demand for public services and utilities such as water and wastewater, solid waste, and electrical or natural gas. However, Alternative 1 would also be serviced by existing providers and infrastructure and would not require new or expanded facilities. Impacts would be similar for both projects.

Conclusion

Overall, Alternative 1 would result in fewer environmental impacts than the proposed project. However, Alternative 1 would not include a mixed-use development on the project site and would not achieve all of the project objectives.

Comparative Impacts of Alternative 2: Market Probable Scenario

Land Use

All development under the proposed project would be consistent with the City's General Plan and Zoning Code, as well as with regional plans adopted for environmental impacts, including the Western Riverside County Multiple Species Habitat Conservation Plan, the Stephens' Kangaroo Rat Habitat Conservation Plan, the Delhi Sands Habitat Conservation Plan, the regional Transportation Uniform Mitigation Fee, the City's Development Impact Fee, the School Impact Fee, and the City's National Pollutant Discharge Elimination (NPDES) permit. Alternative 2 assumes the same type of land uses on the same project site as the proposed project. Future development under Alternative 2 would also be consistent with the City's General Plan and Zoning Code, as well as with regional plans adopted for environmental impacts. Therefore, land use impacts associated with Alternative 2 would be similar to those of the proposed project.

Transportation and Traffic

Increased vehicle trips generated by the proposed project would result in increased congestion and decreased level of service (LOS) below the City's performance standard of LOS C on three roadway segments and eight roadway segments under cumulative conditions.

Under Alternative 2, the non-residential uses would be developed at a lower intensity (less square footage) than the proposed project, thus generating fewer traffic trips. External vehicle trips that would be generated as a result of Alternative 2 are shown in **Table 5.0-3** below. The 45,198 daily vehicle trips generated by Alternative 2 are approximately 17,000 daily trips less than those assumed for the proposed project in the transportation impact assessment (TIA) prepared by Fehr and Peers (2015).

**TABLE 5.0-3
MARKET PROBABLE SCENARIO EXTERNAL VEHICLE TRIPS**

	Vehicle Trips
Daily	45,198
AM Peak Hour	2,035
PM Peak Hour	4,455

Although this reduction in vehicle trips would reduce the severity of congestion-related impacts (e.g. less delay and peak hour spreading), the same three roadway segments operating at LOS F after implementation of the proposed project (Limonite Avenue from Scholar Way to Hamner Avenue, from Hamner Avenue to the I-15 Ramps and from the I-15 Ramps to Wineville Avenue) would continue to operate at LOS F after implementation of Alternative 2. Similar mitigation to the proposed project, including the planned widening of Limonite Avenue via the Riverside County Transportation Uniform Mitigation Fee (TUMF) program (mitigation measure **MM 3.2.1a**), as well as site- and project-specific traffic studies (mitigation measure **MM 3.2.1b**) would mitigate this congestion to the greatest extent feasible. However, the projected LOS F would still conflict with the City's performance standard for this roadway segment.

Under cumulative conditions, all of the roadway segments would continue to operate at LOS E or F after implementation of the proposed project, with the exception of Cantu-Galleano Road from I-15 to Hamner Avenue. After implementation of Alternative 2, both Cantu-Galleano Road from I-15 to Hamner Avenue and I-15 south of Limonite would operate at LOS C and cumulative impacts would be reduced for this roadway segment in comparison to the proposed project. Therefore, while Alternative 2 would reduce both the number of vehicle trips and the severity of congestion-related impacts in comparison to the proposed project, the reduction would not be substantial enough for traffic volumes resulting from Alternative 2 to meet the City's performance standard for roadways.

Air Quality

The air quality analysis for the proposed project identified that the majority of air pollutant emissions would come from automobiles. It is estimated that 63,000 average daily automobile trips would be generated as a result of the proposed project while Alternative 2 would only result in 45,198 daily vehicle trips, which is 17,000 daily trips less than the proposed project. The reduction of average daily automobile trips would substantially reduce air pollutant emissions compared with the proposed project. However, this reduction would not be substantial enough to reduce emission below the significance thresholds promulgated by the South Coast Air Quality Management District. (As a frame a reference, approximately 7,150 average daily trips is enough to surpass significance thresholds.) Therefore, air quality impacts would be lower than the proposed project, but would remain significant.

Climate Change

As with criteria air pollutants, the analysis for the proposed project identified that the majority of greenhouse gas (GHG) emissions would come from automobiles. As discussed above, it is estimated that Alternative 2 would result in 17,000 fewer daily trips than the proposed project. The reduction of average daily automobile trips would reduce GHG emissions when compared to the proposed project.

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Aesthetics, Light, and Glare

Although the proposed project would facilitate a permanent substantial change in the existing visual character of the project site from dairy/agricultural to developed suburban uses, the proposed project is infill development in a developed area and the Leal Master Plan and the Eastvale Municipal Code establish specific parameters for the design and quality of the project area, which must be met by any future development. Therefore, altering the existing visual character of the site would not necessarily degrade it.

Alternative 2 would result in similar land uses to the proposed project, although with less square footage of non-residential land uses and therefore a slightly less development-intensive visual character. Future land uses under Alternative 2 would be in the same infill location as the proposed project and would also be subject to the standards included in the Leal Master Plan, the Eastvale Municipal Code, as well as similar mitigation measures to reduce glare sources. Therefore, similar to the proposed project, Alternative 2 would alter the existing visual character of the site but would not necessarily degrade it and aesthetic, light, and glare impacts would be the same under Alternative 2 as under the proposed project.

Noise

The proposed project would result in significant noise impacts due to the increase in traffic noise in the area and full mitigation of transportation-related noise impacts on existing uses may not be feasible, thus resulting in cumulatively considerable and significant and unavoidable impacts. As discussed above, while Alternative 2 would reduce the number of vehicle trips in comparison to the proposed project, the reduction would not be substantial enough for traffic volumes resulting from Alternative 2 to meet the City's performance standard for roadways, with the exception of one roadway segment in the cumulative condition. As such, segments of Limonite Avenue, Hamner Avenue, and Cantu-Galleano Ranch Road would still need to be widened from four to six lanes under Alternative 2 and the ambient noise levels would increase for land uses adjacent to these roadways after they are widened. Therefore, while Alternative 2 would reduce transportation-related noise on existing uses in comparison to the proposed project, this impact would still be significant under Alternative 2.

Biological Resources

Future development anticipated as a result of the project could adversely affect or damage potential or unknown biological resources on the project site and contribute to the cumulative disturbance and/or loss of these resources in the cumulative setting. However, implementation of the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP) and adherence to additional mitigation measures included in the Leal Master Plan Mitigation Plan would ensure future development adequately mitigates adverse impacts and would reduce all impacts on potential/unidentified biological resources to a less than significant level. Although development under Alternative 2 would be less intense than the proposed project, the ground disturbance footprint would be similar to that of the proposed project. However, future development under Alternative 2 would be subject to similar mitigation measures, as well as to the MSHCP. Therefore, potential impacts to biological resources would be the same under Alternative 2 as under the proposed project.

Cultural Resources

Impacts to cultural resources are generally a result of the location of a project and land disturbance. However, a reduced project size may not necessarily reduce the amount of land disturbance. In the case of the proposed project, achieving the density and intensity of the maximum-case buildout assumption within the project site would require buildings of several stories in height and stacked parking. Alternative 2 could achieve a reduction in non-residential square footage within the same ground disturbance footprint of the proposed project by reducing the height of the proposed buildings.

Mitigation measures were required to reduce the proposed project's impacts to potential or unknown cultural and paleontological resources in the Master Plan area. These same measures would be required for any land disturbances of Alternative 2. Thus, Alternative 2 would have a similar impact to cultural resources than that of the proposed project.

Geology and Soils

Future development under the proposed project would be designed in accordance with CBC requirements that address structural seismic safety and includes design criteria for seismic loading and other geologic hazards. In addition, site specific geotechnical studies would be required (General Plan Action Item S-2.1) as part of the environmental and development review process. These and other local and state regulatory requirements would ensure that geology and soil impacts to future projects under the proposed project would be less than significant. As described above, Alternative 2 could achieve a reduction in non-residential square footage within the same ground disturbance footprint of the proposed project by reducing the height of the proposed buildings. Therefore, future development under Alternative 2 would have the same potential geology and soil impacts as the proposed project. However, future development under Alternative 2 would be subject to the same regulatory requirements and would therefore have similar impacts related to geology and soils as the proposed Project.

Hazards and Hazardous Materials

Hazardous material impacts associated with the proposed project result from the potential for the existing dairy and horse farm buildings to contain asbestos, lead paint, or polychlorinated biphenyls (PCB). Mitigation measures requiring a Phase I ESA and a Phase II ESA would ensure future development adequately mitigates adverse impacts related to these potential hazardous building materials. These same measures would be required for any future development under Alternative 2. In addition, Alternative 2 would have similar types of land uses as the proposed project, and would therefore have the same less than significant potential for the release of hazardous materials. Therefore, Alternative 2 would not result in any changes in the existing hazardous materials environment, and the impacts would be similar to those under the proposed project, since compliance with regulations would be the same under both scenarios.

Hydrology and Water Quality

Hydrology and water quality impacts associated with the proposed project would primarily result from the introduction of impervious surfaces in the form of structures and parking lots to previously undeveloped parcels of land. Development associated with the proposed project may alter the existing drainage pattern of the site to impact stormwater runoff rates and volumes compared to existing conditions. As described above, Alternative 2 could achieve a reduction in non-residential square footage within the same ground disturbance footprint of the proposed project by reducing the height of the proposed buildings. Therefore, future

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development under Alternative 2 would increase impervious surfaces and alter drainage patterns on the project site to a similar extent as the proposed project.

Compliance with Municipal Code Chapter 14.12, submittal of a SWPPP, WQMP, and adherence to policies in the City's General Plan and to General Construction Activity Stormwater Permit requirements would ensure that impacts under both the proposed project and Alternative 2 would not be significant. Overall, Alternative 2 would result in a similar intensity of hydrology and water quality impacts to the proposed project.

Population and Housing

The proposed project would facilitate growth on the project site, the growth would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan and would be consistent with the City's General Plan policies and goals intended to promote smart growth. Alternative 2 would include the same residential component as the proposed project, but would facilitate less non-residential growth. Similar to the proposed project, however, a lower intensity (less non-residential square footage) development alternative would also be consistent with the City's General Plan policies and goals intended to promote smart growth and would also be consistent with the City's long-range planning process for the project site as envisioned in the City's General Plan. Thus, Alternative 2 would have a similar impact as that of the proposed project.

Public Services and Utilities

Future development anticipated as a result of the proposed project would increase demand for public services and utilities; however these services are generally in place and being provided to the Master Plan area. Implementation of the project would not result in the need for new or expanded public services or utility facilities, the construction of which could cause significant environmental impacts. Future development anticipated as a result of the proposed project would require no mitigation measures other than obtaining a water/sewer availability letter from the Jurupa Community Services District. Alternative 2 would include the same residential component as the proposed project, but would facilitate less non-residential growth. Therefore, the demand for public services and utilities such as water and wastewater, solid waste, and electrical or natural gas would be slightly reduced in comparison to the proposed project. As neither the proposed project nor Alternative 2 would require new or expanded facilities, impacts would be similar for both projects.

Conclusion

Overall, Alternative 2 would only slightly reduce the severity of impacts identified for the proposed project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 5.0-4 provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed project. Overall, the No Project Alternative would result in fewer environmental impacts than the proposed project and is the "environmentally superior" alternative. Section 15326(d)(2) of the CEQA Guidelines indicates that, if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this instance, Alternative 2 would be the environmentally superior alternative, as it would achieve all of the

project objectives while resulting in fewer traffic and greenhouse gas impacts than the proposed project.

**TABLE 5.0-4
ALTERNATIVES IMPACT COMPARISON**

Environmental Issue	Proposed Project Impact Finding (Mitigated)	ALT 1: No Project	ALT 2: Market Probable Scenario
Land Use	Less than Significant	=	=
Transportation and Traffic	Significant	-	-
Air Quality	Significant	=	=
Greenhouse Gases and Climate Change	Less than Significant	-	-
Aesthetics, Light, and Glare	Less than Significant	+	=
Noise	Significant	-	=
Cultural Resources	Less than Significant	=	=
Geology and Soils	Less than Significant	=	=
Hazards and Hazardous Materials	Less than Significant	-	=
Hydrology and Water Quality	Less than Significant	=	=
Population and Housing	Less than Significant	=	=
Public Services and Utilities	Less than Significant	=	=
Overall		=	=

- Impacts less than those under proposed project

+ Impacts greater than those under proposed project

= Impacts the same as those under proposed project, or no better or worse

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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 Leal Master 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

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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. The land uses permitted by the proposed Leal Master Plan are consistent with the goals, policies, and general land uses described in the City of Eastvale General Plan.

GROWTH EFFECTS OF THE PROJECT

Based on Government Code Section 65300, the City of Eastvale General Plan is intended to serve as the overall plan for the physical development of Eastvale. Although implementation of the project would facilitate growth directly via increased housing units and associated population on the project site and indirectly via increased employment opportunities, the project site is identified in the City's General Plan as representing "a significant development opportunity" and in General Plan Policy LU-19 that calls for a mixed-use project with office, civic, hotel, multi-family residential, and recreation and entertainment land uses on the site.

Therefore, while development of the proposed project would enable increases in population, housing, and employment, those increases have been anticipated and accounted for through the City's planning processes; the project would not induce growth beyond that already considered by the City. Future development of the Leal Master Plan would implement the long-range planning process for the project site envisioned in the City's General Plan.

Because the land surrounding the property is already developed with residential, commercial, and retail uses, and the project would not require or result in the extension of infrastructure to an undeveloped area, it is unlikely that the proposed Master Plan would result in growth or intensification of development or sprawl in the surrounding region.

The specific environmental effects resulting from the growth effects of the project are discussed in Sections 3.1 through 3.13 of this Draft EIR. The following is a discussion of the potential growth-inducing effects of the project.

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. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified.

Implementation of the proposed project would result in the conversion of a mostly undeveloped dairy farm to commercial, office, hotel, civic, and residential uses. Subsequent development under the Master Plan would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the project site to its original condition.

Development of the project site 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 future 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 increased demand on public services (see Section 3.13, Public Services and Utilities).

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 project, which have been recognized as significant and unavoidable in either the project or cumulative context, are specifically identified in Sections 3.1 through 3.13 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.

TRANSPORTATION AND TRAFFIC

Threshold Discussion 3.2.1 The project would be considered to have a significant impact if it would result in traffic volumes on area roadways that would exceed performance standards identified in the City's General Plan. This impact is **potentially significant**.

Limonite Avenue: Scholar Way to Hamner Avenue; Hamner Avenue to I-15 Ramps

The transportation impact assessment (TIA) determined that, in order to mitigate traffic impacts on these segments of Limonite Avenue, Limonite Avenue would need to be widened to eight lanes, which is inconsistent with the City's Circulation Plan and roadway classifications as shown in the City's General Plan. Therefore, widening the roadway to eight lanes to improve the level of service is not feasible and level of service (LOS) would remain at LOS F after implementation of the Leal Master Plan. The planned widening of Limonite Avenue via the Riverside County Transportation Uniform Mitigation Fee (TUMF) program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would mitigate this congestion to the greatest extent feasible. However, the projected LOS F would still conflict with the City's performance standard for this roadway segment. This impact would remain **significant and unavoidable**.

Limonite Avenue: I-15 Ramps to Wineville Avenue

The TIA determined that, in order to mitigate traffic impacts on this segment of Limonite Avenue, this segment of Limonite Avenue would need to be widened to six lanes. Although the widening of Limonite Avenue is a TUMF-designated improvement, this roadway segment is not included and is identified in the 2015 Northwest TUMF Zone Transportation Improvement Program as having an ultimate width of four lanes. This roadway segment is outside of Eastvale. As such, neither the City nor any developer can guarantee implementation of any mitigation measure to widen the roadway segment. As such, this impact is considered **significant and unavoidable**.

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Threshold Discussion 3.2.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan would contribute to cumulative traffic volumes in the region, resulting in significant impacts to level of service and degradation of traffic operations. This is considered a **cumulatively considerable** impact.

Limonite Avenue: Archibald Avenue to Harrison Avenue; Harrison Avenue to Scholar Way; Scholar Way to Hamner Avenue; and Hamner Avenue to I-15

The TIA determined that, in order to mitigate cumulative traffic impacts to these segments, Limonite Avenue would need to be widened beyond six lanes, which would be inconsistent with the City's General Plan as discussed above. Therefore, widening the roadway to operate at LOS C under cumulative conditions is not feasible. The planned widening of Limonite Avenue to six lanes via the TUMF program (mitigation measure **MM 3.2.1a**), as well as future site- and project-specific traffic studies required by mitigation measure **MM 3.2.1b**, would mitigate this congestion to the greatest extent feasible. However, the projected LOS would still conflict with the City's performance standard for these roadway segments. This impact would remain **cumulatively considerable** and **significant and unavoidable**.

Limonite Avenue: I-15 Ramps to Wineville Avenue

The TIA determined that, in order to mitigate cumulative traffic impacts, this segment of Limonite Avenue would need to be widened to six lanes. As discussed above, although the widening of Limonite Avenue is a TUMF-designated improvement, this roadway segment is not included and is identified in the 2015 Northwest TUMF Zone Transportation Improvement Program as having an ultimate width of four lanes. Additionally, this roadway segment is outside of Eastvale. As such, neither the City nor any developer can guarantee implementation of any mitigation measure to widen the roadway segment. As such, the project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

Hamner Avenue: Limonite Avenue to Bellegrave Avenue

The TIA determined that, in order to mitigate cumulative traffic impacts to this segment of Hamner Avenue, Hamner Avenue would need to be widened beyond the six lanes that are planned for in the City's General Plan. Therefore, widening the roadway to operate at LOS C under cumulative conditions is not feasible. Mitigation measure **MM 3.2.1c** as included in the Leal Master Plan Mitigation Program ensures that future development projects would be responsible for widening Hamner Avenue to six lanes, and mitigation measure **MM 3.2.1b** requires that future development projects prepare focused traffic studies which would address site- and project-specific traffic impacts. However, project traffic volumes would still contribute to traffic operations on Hamner Avenue exceeding the City's level of service thresholds under cumulative conditions. The project's contribution to this cumulative impact would be considered **cumulatively considerable** and **significant and unavoidable**.

I-15: South of Limonite; North of SR 60

The TIA determined that, in order to mitigate the cumulative impacts to these two segments, the project would be responsible for a fair-share contribution toward additional freeway capacity beyond that already planned along the segments. Additionally, both of these segments are outside of Eastvale. As such, neither the City nor any developer can guarantee implementation

of the mitigation measure. This impact would be considered **cumulatively considerable and significant and unavoidable**.

AIR QUALITY

Threshold Discussion 3.3.1 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of construction activity. This impact would be **potentially significant**.

The quantification of air quality emissions from short-term, temporary construction activities associated with the proposed Master Plan is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc. However, all construction projects can produce ozone precursors and nuisance dust emissions. Therefore, future project-level analyses of air quality impacts, in accordance with CEQA requirements, would be required to be conducted on a case-by-case basis as individual, future development projects allowed under the Master Plan proceed. While the South Coast Air Quality Management District (SCAQMD) has promulgated methodology protocols for the preparation of air quality analyses, and future development projects allowed under the Master Plan that are projected to exceed SCAQMD significance thresholds are required to implement mitigation measures in order to reduce air pollutant emissions as much as feasible, SCAQMD significance thresholds may still be exceeded during project construction. Since it cannot be guaranteed that construction of future projects allowed under the Master Plan would generate air pollutant emissions below SCAQMD significance thresholds due to the programmatic and conceptual nature of the proposed project and uncertainties related to future individual projects, this is considered a **significant and unavoidable** impact.

Threshold Discussion 3.3.2 The project would be considered to have a significant impact if future development anticipated as a result of the proposed project could contribute to an existing air quality violation as a result of long-term operations. This impact would be **potentially significant**.

Buildout of the Master Plan, assuming the most conservative land use potential, would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which the South Coast Air Basin (SoCAB) is in nonattainment. Future development projects that are projected to exceed SCAQMD significance thresholds are required to implement mitigation measures, per Eastvale General Plan Policy AQ-17, in order to reduce air pollutant emissions as much as feasible. Even if the SCAQMD's recommended strategies are implemented, significance thresholds may be exceeded during individual project operations and significance thresholds are still projected to be exceeded at Master Plan buildout. This is considered a **significant and unavoidable** impact.

Threshold Discussion 3.3.7 The project would be considered to have a cumulatively considerable impact if implementation of the proposed Master Plan, in combination with existing, approved, proposed, and reasonably foreseeable development in the South Coast Air Basin, could significantly contribute to cumulative increases in emissions of criteria air pollutants that could contribute to future concentrations of pollutants for which the region is currently

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designated nonattainment. The impact would be considered **cumulatively considerable**.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable. The proposed project would be consistent with the Air Quality Management Plan, which is intended to bring the SoCAB into attainment for all criteria pollutants. However, the project could potentially exceed the construction standards, and the project will exceed the operational standards at buildout of the Master Plan. As such, impacts would be **cumulatively considerable** and **significant and unavoidable**.

NOISE

Threshold Discussion 3.6.3 The project would be considered to have a significant impact if traffic generated by future development under the proposed Master Plan would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This is a **potentially significant** impact.

The addition of traffic from future development of the project area to area roadways would contribute to increases in traffic noise levels, including an increase in the ambient noise levels for land uses adjacent to these roadways. Future development projects within the Master Plan area would be designed and constructed consistent with policies in the City of Eastvale General Plan Noise Element intended to reduce noise exposure and would be required to prepare a focused acoustical assessment to demonstrate project compliance with interior and exterior noise standards (mitigation measure **MM 3.6.1**). However, these measures would not address traffic noise levels affecting existing land uses in the vicinity of project area roadways. General Plan Policy N-18 requires that natural buffers, setbacks, or other noise attenuation be established between freeways and urban arterial roadways and adjoining noise-sensitive areas and that noise mitigation practices be employed when designing all future streets and highways and when improvements occur along existing highway segments. All roadway improvements implemented in Eastvale and by the City would be required to comply with this policy. However, some of the roadway segments affected by the proposed project are not in Eastvale and would have improvements planned and implemented at a regional level. In these cases, noise mitigation practices/design cannot be guaranteed. Furthermore, it is possible that full mitigation of transportation-related noise impacts on existing uses in the city would be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. Therefore, this impact would remain **significant and unavoidable**.

Threshold Discussion 3.6.6 The project would be considered to have a cumulatively considerable impact if, under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. This is a **cumulatively considerable** impact.

Under cumulative conditions, traffic noise levels from future development of the Leal Master Plan, along with other proposed, planned, and approved development in Riverside County, would increase and would expose both existing and future populations to increased transportation-related noise levels. Although predicted increases in traffic noise levels for future cumulative conditions would also be attributable to projected increases in development in the surrounding community, the project's contribution to future cumulative traffic noise levels along area roadway segments would still be considered significant. As previously discussed, full mitigation of transportation-related noise impacts on existing uses could be infeasible due to cost or design obstacles associated with redesigning or retrofitting existing buildings or sites for sound attenuation. For example, commonly employed traffic noise mitigation measures, such as sound barriers, may not be feasible at some land uses, particularly existing residential land uses that front major roadways. As a result, this impact is considered **cumulatively considerable and significant and unavoidable**.

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