

City of Rancho Cucamonga GENERAL PLAN UPDATE & CLIMATE ACTION PLAN

Draft Environmental Impact Report September 2021

State Clearinghouse No. 2021050261

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1. Executive Summary

1.1 INTRODUCTION

This draft environmental impact report (EIR) addresses the environmental effects associated with the implementation of the proposed City of Rancho Cucamonga General Plan Update (project). The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before acting on projects over which they have discretionary approval authority. An environmental impact report (EIR) analyzes potential environmental consequences to inform the public and support informed decisions by local and state governmental agency decision makers.

This EIR has been prepared pursuant to the requirements of CEQA and the City of Rancho Cucamonga's CEQA procedures. The City of Rancho Cucamonga, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgement, including reliance on City technical personnel from other departments and review of all technical subconsultant reports.

Data for this EIR derive from onsite field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments (aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire).

1.2 ENVIRONMENTAL PROCEDURES

This EIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

- 1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
- 2. Identify ways to avoid or reduce environmental damage.
- 3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
- 4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
- 5. Foster interagency coordination in the review of projects.
- 6. Enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

1.3 PROJECT LOCATION

The City of Rancho Cucamonga is in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south, and east including the cities of Upland, Ontario, and Fontana and a large area of rural unincorporated San Bernardino County to the north and east. The northernmost portion of the City's Sphere of Influence (SOI) is adjacent to the San Bernardino National Forest. Interstate and regional access to the City is provided by Interstate 15 (I-15), which runs in a general north-south direction and bisects the eastern portion of the City, and by State Route 210 (SR-210), an east-west freeway that runs through the center of the City. The I-10 freeway also provides regional access and is located approximately 0.75-mile south of the City boundary. Figure 1-1, *Regional Location*, and Figure 1-2, *Citywide Aerial*, show the General Plan Area in its regional and local contexts.

1.4 PROJECT SUMMARY

The project is an update of the City of Rancho Cucamonga's General Plan. The General Plan is a state-required legal document that provides guidance to decision-makers regarding the allocation of resources and determining the future physical form and character of development in the City and its SOI. It is the official statement of the City regarding the extent and types of development needed to achieve the community's physical, economic, social, and environmental goals. Although the General Plan is composed of individual chapters that individually address a specific area of concern, the General Plan embodies a comprehensive and integrated planning approach for the jurisdiction.

1.4.1 PROPOSED GENERAL PLAN

The project includes the following elements that address all the required topics in state law:

- Land Use and Community Character
- Focus Areas
- Open Space
- Mobility and Access

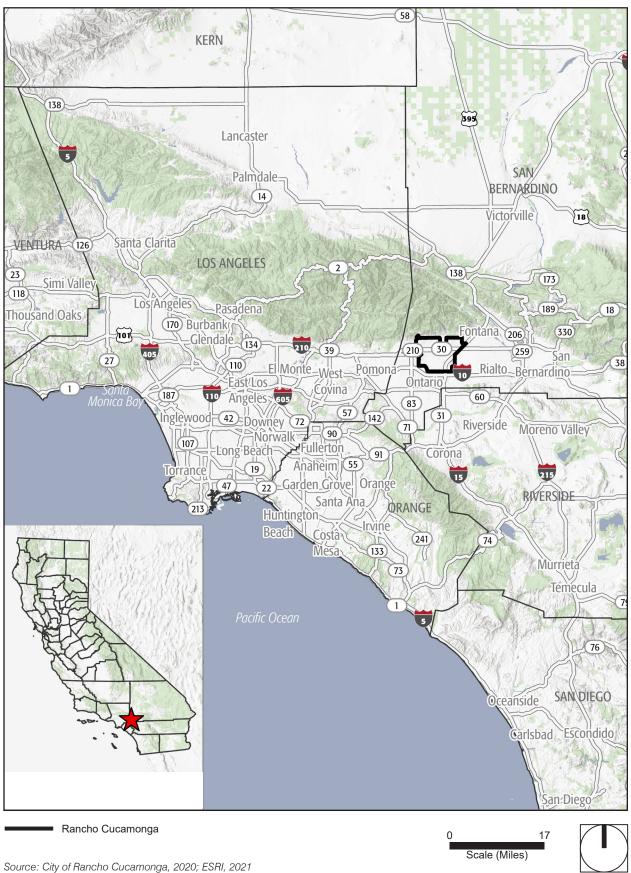
- Housing
- Public Facilities and Services
- Resource Conservation
- Safety
- Noise

1.4.1.1 Comparison of Current Land Uses and Buildout

Figure 1-3, *Existing Land Uses*, illustrates existing land uses as of 2020. Figure 1-4, *Land Use Plan* shows the land use designations regulating development. Buildout projections shown in Table 1-1, *Land Use Development Projections by Focus Area and Remainder of City for Buildout*. As detailed in Table 1-1, the project would result in a potential net change of 57,566 residents, 25,685 units, 6,802 square feet of retail/commercial space, 9,733 square feet of office space, and 5,122 square feet of industrial and flex space.

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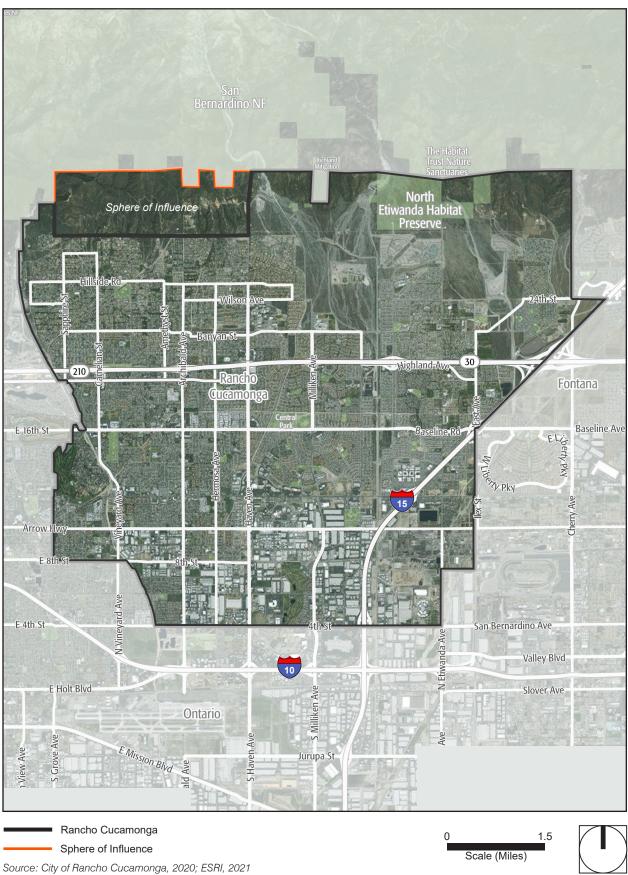
Figure 1-1 - Regional Location 1. Introduction



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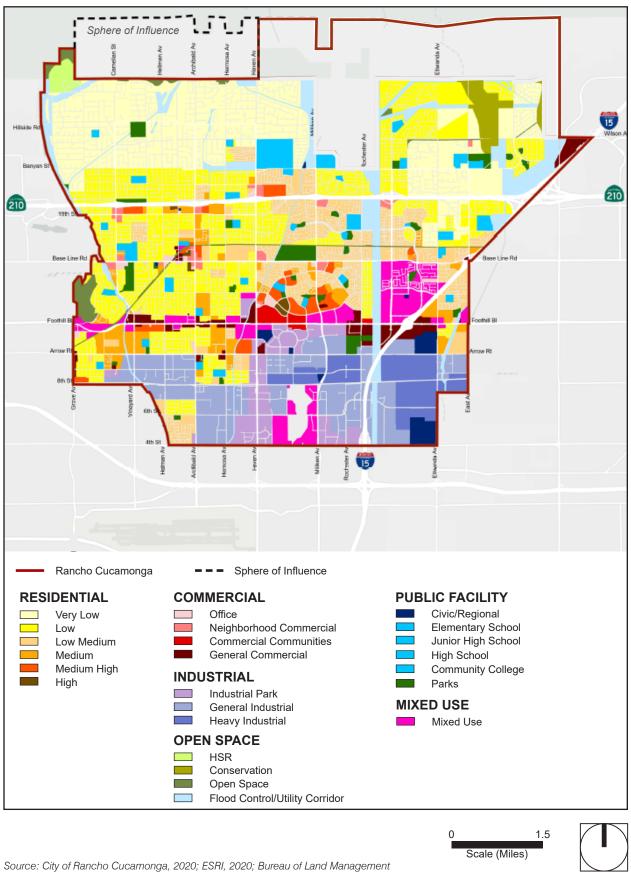
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> Figure 1-2 - Citywide Aerial 1. Introduction



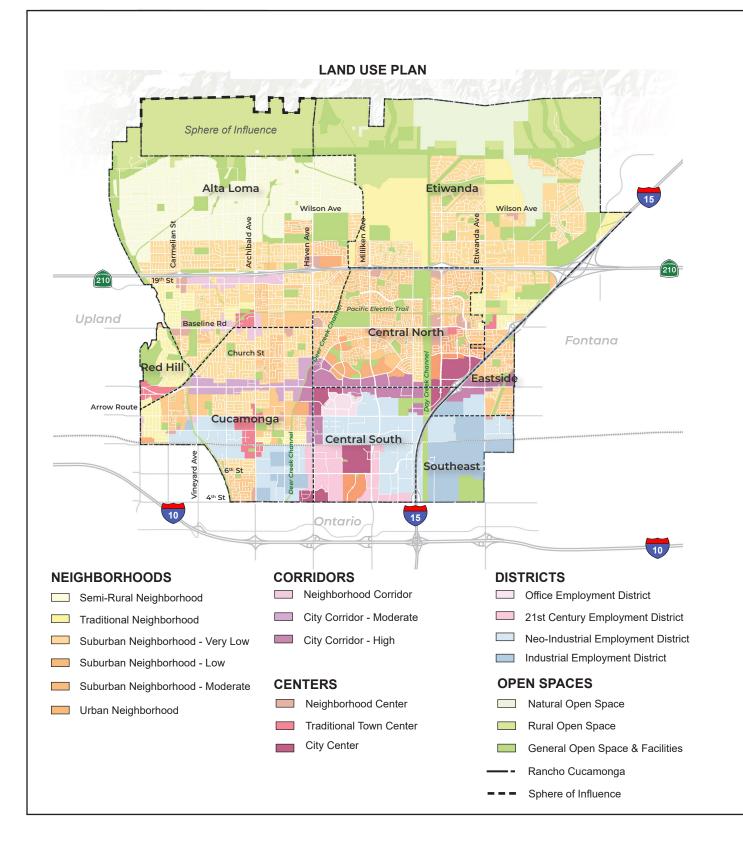
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Figure 1-3 - Existing Land Uses 1. Introduction



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GENERAL PLAN DESIGNATIONS



	General Plan Designation	Residential Density (DU/AC)*	Non-Residential Intensity (FAR)	Target Use Mix Ratio (Res/Non-Res)
NE	IGHBORHOODS			
	Semi-Rural Neighborhood	Max. 2	NA	100/0
	Traditional Neighborhood	Max. 8	Max. 0.4	80/20
	Suburban Neighborhood - Very Low	Max. 6	NA	100/0
	Suburban Neighborhood - Low	Max. 14	NA	100/0
	Suburban Neighborhood - Moderate	Max. 30	NA	100/0
	Urban Neighborhood	20 - 50	0.2 - 0.4	80/20
со	RRIDORS			
	Neighborhood Corridor	Max. 24	0.4 - 0.6	70/30
	City Corridor - Moderate	24 - 42	0.4 - 1.0	70/30
	City Corridor - High	36 - 60	0.6 - 1.5	70/30
CE	NTERS			
	Neighborhood Center	Max. 24	0.2 - 0.4	20/80
	Traditional Town Center	Max. 30	0.2 - 0.6	50/50
	City Center	40 - 100	1.0 - 2.0	50/50
DIS	STRICTS			
	Office Employment District	18 - 30	0.6 - 1.0	20/80
	21st Century Employment District	24 - 42	0.4 - 1.0	30/70
	Neo-Industrial Employment District	14 - 24	0.4 - 0.6	10/90
	Industrial Employment District	NA	0.4 - 0.6	0/100
OP	EN SPACES			
	Natural Open Space	NA	NA	NA
	Rural Open Space	Max. 2	NA	NA
	General Open Space & Facilities	NA	NA	NA

Note: See the following page on "Calibrating Development" for further details on density, FAR, and use mix ratio. The standard for population density for all areas covered by the General Plan will be dictated by the occupancy limits in the City's building codes.

CITY OF RANCHO CUCAMONGA GENERAL PLAN UPDATE DRAFT EIR CITY OF RANCHO CUCAMONGA

Figure 1-4 - Land Use Plan 1. Introduction

1.5 0 Scale (Miles)



PlaceWorks

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		Residen	tial	Non-Re	l Jobs	
Focus Areas	Scenario	Population	Units	Retail/ Commercial	Office	Industrial, Flex
	Existing	11,224	3,798	774	511	96
Alta Loma TC	No Project	10,409	3,876	896	325	165
	Plus Project	11,334	4,017	843	703	91
	Existing	25,258	9,871	2,678	3,274	4,168
Civic Center /	No Project	9,469	3,866	2,850	3,497	3,683
Haven	Plus Project	33,544	13,583	3,854	4,323	4,245
	Existing	6,989	2,466	1,297	2,069	2,217
Cucamonga TC	No Project	9,971	3,949	3,179	3,418	2,197
	Plus Project	7,930	2,881	1,513	2,407	2,368
	Existing	1,287	521	1,603	3,204	4,318
Rancho Cucamonga	No Project	15,447	6,653	1,077	1,625	1,637
Station	Plus Project	10,015	4,180	2,828	4,600	4,342
	Existing	6,593	2,359	447	238	172
Red Hill Gateway	No Project	8,563	3,399	1,762	770	747
	Plus Project	8,013	2,971	915	775	165
	Existing	3,748	1,432	8,855	344	531
Victoria Gardens / Epicenter	No Project	4,070	1,606	6,453	1,002	978
	Plus Project	22,495	9,290	9,742	1,039	486
	Existing	121,230	40,348	9,306	7694	10335
Remainder of City	No Project	138,630	50,006	11,973	10,230	10375
	Plus Project	140,564	49,558	12,067	13,220	15262
	Existing	176,329	60,795	24,960	17,334	21,837
Totals	No Project	196,559	73,355	28,190	20,86 7	19,782
	Plus Project	233,895	86,480	31,762	27,067	26,959
	Existing		175,522			
Net Change from Existing	No Project	20,230	12,560	3,230	3,533	-2,055
<u> </u>	Plus Project	57,566	25,685	6,802	9,733	5,122
-	No Project	195,752	54,967	23,887	45,938	20,262
Totals	Plus Project	233,088	68,092	27,459	52,138	27,439

Land Use Development Projections By Focus Area and Remainder of City for Buildout

Table 1-1

¹ Other land uses such as agriculture, art, entertainment, recreation, and public/institution represent a net zero change in projected jobs and are not included in the table.

1.4.2 EIR FORMAT

Chapter 1. Executive Summary: Summarizes the background and description of the project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

Chapter 2. Introduction: Describes the purpose of this EIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

Chapter 3. Project Description: A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this EIR. As the project is a General Plan, the project description is a summary of the lengthier document that is included as Appendix 3-1 to this EIR.

Chapter 4. Environmental Setting: A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

Chapter 5. Environmental Analysis: Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the project and other existing, approved, and proposed development in the area.

Chapter 6. Unavoidable Impacts, Irreversible Changes, and Growth-Inducing Impacts: Describes the significant unavoidable adverse impacts and significant irreversible environmental changes associated with the project. Describes the ways in which the project would cause increases in employment or population that could result in new physical or environmental impacts.

Chapter 7. Alternatives to the Project: Describes the alternatives and compares their impacts to the impacts of the project. Alternatives include the No Project Alternative.

Chapter 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the project that were determined not to be significant by the Initial Study and were therefore not discussed in detail in this EIR.

Chapter 9. Organizations Consulted and Qualifications of Preparers: Lists the people and organizations that were contacted during the preparation of this EIR, as well as the people who prepared this EIR for the project.

Appendices: The appendices for this document are available online at https://www.cityofrc.us/GeneralPlan and comprise these supporting documents:

- Appendix 2-1: Existing Conditions Reports
- Appendix 2-2: NOP and NOP Comments
- Appendix 3-1: City of Rancho Cucamonga General Plan Public Review Draft May 2021
- Appendix 5.3-1: Air Emissions Modeling Calculations
- Appendix 5.8-1: Administrative Draft Climate Change Action Plan
- Appendix 5.13-1: Noise and Vibration Technical Memorandum
- Appendix 5.14-1: Growth Assumption Memorandum

1.4.3 TYPE AND PURPOSE OF THIS EIR

This EIR fulfills the requirements for a Program EIR. Agencies prepare Program EIRs for programs or a series of related actions that are linked geographically; logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

Although the legally required contents of a Program EIR are the same as a Project EIR, Program EIRs are typically more conceptual than Project EIRs, with a more general discussion of impacts, alternatives, and mitigation measures. According to Section 15168 of the CEQA Guidelines, a Program EIR may be prepared on a series of actions that can be characterized as one large project. Use of a Program EIR gives the lead agency an opportunity to consider broad policy alternatives and program-wide mitigation measures, as well as greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive scale.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine whether an additional CEQA document is necessary. However, if the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities may be within the Program EIR's scope, and additional environmental documents may not be required (Guidelines § 15168[c]). When a lead agency relies on a Program EIR for a subsequent activity, it must incorporate feasible mitigation measures and alternatives from the Program EIR into the subsequent activities (Guidelines § 15168[c][3]). If a subsequent activity would have effects outside the scope of the Program EIR, the lead agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or an EIR. Even in this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines encourage the use of Program EIRs, citing five advantages:

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR,
- Focus on cumulative impacts that might be slighted in a case-by-case analysis,
- Avoid continual reconsideration of recurring policy issues,
- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them, and
- Reduce paperwork by encouraging the reuse of data (through tiering) (Guidelines § 15168[h]).

1.5 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (§ 15126.6[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The alternatives in this EIR were based, in part, on their potential ability to reduce or eliminate the impacts determined to be significant and unavoidable for implementation of the project. Project alternatives are assessed in further detail in Chapter 7, *Alternatives to the Project*.

1.5.1 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

The No Project Alternative is required to discuss the existing conditions at the time the notice of preparation is published and evaluate what would reasonably be expected to occur in the foreseeable future if the proposed project is not approved (CEQA Guidelines, Section 15126.6(e)). Pursuant to CEQA, this Alternative is also based on current plans and consistent with available infrastructure and community services. Therefore, the No Project/Existing General Plan Alternative assumes that the proposed General Plan would not be adopted, and the development intensity assumed in the existing General Plan would be followed.

1.5.2 DISPERSED DEVELOPMENT ALTERNATIVE

Integral to the design of the proposed General Plan Update is a focus on placing new development along major transportation corridors that either have transit or will have excellent transit as the plan develops. These areas were identified in the 2010 General Plan, and the proposed General Plan expands on the development concepts for these areas. This emphasis on areas planned for intense development was done specifically to make the best use of transit and to help protect the older outlying neighborhoods from substantial growth.

This alternative would disperse the projected growth over the entire City. Changes to the existing land use designations, like those of the proposed project, would be required to allow this growth to occur as the potential 2040 buildout population of 233,088 is greater than the 2030 buildout population potential of 203,800. While this alternative was chosen to provide a counterpoint to the design approach taken in the proposed General Plan Update, the alternative also addresses the significant and unavoidable impacts associated with noise and air quality linked to building homes near busy transit corridors.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the project, the major issues to be resolved include decisions by the lead agency as to:

- 1. Whether this EIR adequately describes the environmental impacts of the project.
- 2. Whether the benefits of the project override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
- 3. Whether the proposed land use changes are compatible with the character of the existing area.
- 4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.
- 5. Whether there are other mitigation measures that should be applied to the project besides the Mitigation Measures identified in the EIR.
- 6. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the project and achieve most of the basic project objectives.

1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. The City has no knowledge of expressed opposition to the project.

1.8 STANDARD CONDITIONS OF APPROVAL

The City has existing regulations that relate to the environmental topical areas, compliance with which would reduce negative environmental impacts. Compliance with standard conditions would be required for all new development and redevelopment in the city.

Aesthetics

 5.1-1: A detailed on-site lighting plan, including a photometric diagram, shall be submitted by project applicants and reviewed and approved by the Planning Director and Police Department prior to the issuance of building permits. Such plan shall indicate style, illumination, location, height, and method of shielding so as not to adversely affect adjacent properties. 5.1-2: Solar access easements shall be dedicated for the purpose of assuming that each lot or dwelling unit shall have the right to receive sunlight across adjacent lots or units for use of a solar energy system. The easements may be contained in a Declaration of Restrictions for the subdivision which shall be recorded concurrently with the recordation of the final map or issuance of permits, whichever comes first. The easements shall prohibit the casting of shadows by vegetation, structures, fixtures, or any other object, except for utility wires and similar objects, pursuant to Development Code Section 17.08.060-G-2.

Agriculture and Forestry Resources

There are no existing regulations that reduce impacts on agricultural and forestry resources.

Air Quality

- 5.3-1: The City shall ensure that discretionary development will incorporate best management practices (BMPs) to reduce emissions to be less than applicable thresholds. These BMPs include but are not limited to the most recent South Coast AQMD recommendations for construction BMPs (per South Coast AQMD's CEQA Air Quality Handbook, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 AQMP, and SCAG's Mitigation Monitoring and Reporting Plan for the 2020-2045 RTP/SCS, or as otherwise identified by South Coast AQMD).
- 5.3-2: Applicants for future discretionary development projects that would generate construction-related emissions that exceed applicable thresholds, will include, but are not limited to, the mitigation measures recommended by South Coast AQMD (in its CEQA Air Quality Handbook or otherwise), to the extent feasible and applicable to the project. The types of measures shall include but are not limited to: maintaining equipment per manufacturer specifications; lengthening construction duration to minimize number of vehicle and equipment operating at the same time; requiring use of construction equipment rated by the EPA as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emissions limits, applicable for engines between 50 and 750 horsepower; and using electric-powered or other alternative-fueled equipment in place of diesel-powered equipment (whenever feasible). Tier 3 equipment can achieve average emissions reductions of 57 percent for NO_x, 84 percent for VOC, and 50 percent for particulate matter compared to Tier 1 equipment. Tier 4 equipment can achieve average emissions reductions of 71 percent for NO_x, 86 percent for VOC, and 96 percent for particulate matter compared to Tier 1 equipment.
- 5.3-3: The City shall ensure that discretionary development that will generate fugitive dust emissions during construction activities will, to the extent feasible, incorporate BMPs that exceed South Coast AQMD's Rule 403 requirements to reduce emissions to be less than applicable thresholds.
- **5.3-4:** Applicants for future discretionary development projects which will generate construction-related fugitive dust emissions that exceed applicable thresholds will include, but are not limited to, the mitigation measures recommended by South Coast AQMD's CEQA Air Quality Handbook, to the extent feasible and applicable:

- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excess amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of watering (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. This measure can achieve PM₁₀ reductions of 61 percent through application of water every three hours to disturbed areas.
- Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - All trucks shall be required to cover their loads as required by California Vehicle Section 23114. Covering loads and maintaining a freeboard height of 12 inches can reduce PM₁₀ emissions by 91 percent.
 - All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. Application of water every three hours to disturbed areas can reduce PM₁₀ emissions by 61 percent.
- Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust. Replacement of ground cover in disturbed areas can reduce PM₁₀ emissions by 5 percent.
- Signs shall be posted on-site limiting traffic to 15 miles per hour or less. This measure can reduce associated PM₁₀ emissions by 57 percent.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth-moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard offsite or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with South Coast AQMD when winds are excessive.

- Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

Biological Resources

- 5.4-1: Special status plant and wildlife species have the potential to occur within the proposed General Plan Update Study Area. Any project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City, consistent with its performance criteria of mitigating lost habitat at a ratio no less than one to one (one acre restored for every acre impacted).
- 5.4-2: Any project within the proposed General Plan Update Study Area that impacts a Federally listed species, based on a biological survey or other analysis of the project, shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- 5.4-3: Any project within the proposed General Plan Update Study Area that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement,

monitor, and maintain the mitigated habitat according to the requirements of the 2080 CESA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Wildlife and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3)site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- 5.4-4: To avoid conflicts with the Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a preconstruction survey (or possibly multiple surveys) by a qualified biologist is recommended prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the California Department of Fish and Wildlife and the City.
- 5.4-5: A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- 5.4-6: The Porter-Cologne Act and Sections 1600 to 1616 of the California Fish and Game Code protect "waters of the State." Agreements (Streambed Alteration Agreements) from the California Department of Fish and Wildlife (CDFW) shall be required for impacts on

areas in CDFW's jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFW resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFW requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFW, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- 5.4-7: The City of Rancho Cucamonga shall require a habitat connectivity/wildlife corridor evaluation for future development projects that may impact existing connectivity areas and wildlife linkages identified in Figure 5.4-6, *Wildlife Movement Linkages Map*. The results of the evaluation shall be incorporated into the project's biological report required under standard condition of approval 5.4-1. The evaluation shall also identify project design features that would reduce potential impacts and maintain habitat and wildlife movement. To this end, the City shall incorporate the following measures, to the extent practicable, for projects impacting wildlife movement corridors:
 - Adhere to low density zoning standards
 - Encourage clustering of development
 - Avoid known sensitive biological resources
 - Provide shielded lighting adjacent to sensitive habitat areas
 - Encourage development plans that maximize wildlife movement
 - Provide buffers between development and wetland/riparian areas
 - Protect wetland/riparian areas through regulatory agency permitting process
 - Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries
 - Encourage preservation of native habitat on the undeveloped remainder of developed parcels
 - Minimize road/driveway development to help prevent loss of habitat due to roadkill and habitat loss
 - Use native, drought-resistant plant species in landscape design
 - Encourage participation in local/regional recreational trail design efforts

Cultural Resources

- **5.5-1:** If a future project pursuant to the General Plan Update contains a designated Historical Landmark, the site shall be developed and maintained in accordance with the applicable Historic Landmark Alteration Permit. Any further modifications to the site including, but not limited to, exterior alterations and/or interior alterations which affect the exterior of the buildings or structures, removal of landmark trees, demolition, relocation, reconstruction of buildings or structures, or changes to the site, shall require a modification to the Certificate of Appropriateness subject to Historic Preservation Commission review and approval.
- **5.5-2:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.
- **5.5-3:** If a building within the project area was constructed more than 50 years ago, the City will require a determination of whether the building, or site, could be considered historic. If the project is considered historic Chapter 17.18 Historic Preservation will apply.
- 5.5-4: Prior to any construction activities that may affect historical resources (i.e., structures 45 years or older), a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards in architectural history or history. This shall include a records search to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or designated in the National Register of Historic Places, California Register of Historic Resources, or a local register. Following the records search, the qualified architectural historian shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Pursuant to the definition of a historical resource under CEQA, potential historical resources shall be evaluated under a developed historic context.
- **5.5-5:** To ensure that projects requiring the relocation, rehabilitation, or alternation of a historical resource not impact its significant, the *Secretary of Interior's Standards for the Treatments of Historic Properties* shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the Professionally Qualified Standards. Prior to any construction activities that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Rancho Cucamonga.
- 5.5-6: If a proposed project would result in the demolition or significant alteration of historical resource, it cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the resource to the greatest extent possible. Recordation shall take the form of Historic American Buildings Survey, Historic American Engineering Record, or Historic

American Landscape Survey documentation, and shall be performed by an architectural historian or historian who meets the Professionally Qualified Standards. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information such as building plans and elevations, and/or historical photographs. Documentation shall be reproduced on archival paper and placed in appropriate local, state, or federal institutions. The specific scope and details of documentation would be developed at the project level.

- 5.5-7: If cultural resources that are eligible for listing to the National Register of Historic Places, California Register of Historic Resources, or a local register are identified within or adjacent to the proposed development, the construction limits shall be clearly flagged to ensure impacts to eligible cultural resources are avoided or minimized to the extent feasible. Prior to implementing construction activities, a qualified archaeologist shall verify that the flagging clearly delineates the construction limits and eligible resources to be avoided. Since the location of some eligible cultural resources is confidential, these resources will be flagged as environmentally sensitive areas.
- 5.5-8: To determine the archaeological sensitivity for discretionary projects within the city, an archaeological resources assessment shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology. The assessments shall include a California Historical Resources Information System (CHRIS) records search and a search of the Sacred Lands File (SLF) maintained by the Native American Heritage Commission (NAHC). The records searches shall determine if the proposed project has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A Phase I pedestrian survey shall be undertaken in areas that are undeveloped to locate any surface cultural materials.
 - a. If potentially significant archaeological resources are identified through an archaeological resources assessment, and impacts to these resource cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities to determine significance. If resources determined significant or unique through Phase II testing, and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include a Phase III data recovery program that would be implemented by a qualified archaeologist and shall be performed in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format (1990) and Guidelines for Archaeological Research Designs (1991).
 - b. If the archaeological assessment did not identify potentially significant archaeological resources within the proposed General Plan area but indicated the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-

construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial onsite safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significant, it shall be curated with a recognized scientific or educational repository.

c. If the archaeological assessment did not identify potentially significant archaeological resources, but indicates the area to be of medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or education repository.

Energy

There are no standard conditions of approval that reduce energy consumption.

Geology and Soils

- 5.7-1: Development of projects pursuant to the General Plan Update shall comply with the City's modifications to the Alquist-Priolo Earthquake Fault Zone Act that call for geotechnical investigations for all proposed structures designed for human occupancy within the expanded AP Zones, including a zone along a splay of the Cucamonga Fault and another zone along the scarp at Red Hill. Also, geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet.
- 5.7-2: All future building pads shall be seeded and irrigated for erosion control. Detailed plans shall be included in the landscape and irrigation plans to be submitted for Planning Department approval prior to the issuance of building permits.
- **5.7-3:** A geological report shall be prepared for an individual project by a qualified engineer or geologist and submitted at the time of application for grading plan check.

- **5.7-4:** The final grading plan, appropriate certifications and compaction reports shall be completed, submitted, and approved by the Building and Safety Official prior to the issuance of building permits.
- **5.7-5:** A separate grading plan check submittal is required for all new construction projects and for existing buildings where improvements being proposed will generate 50 cubic yards or more of combined cut and fill. The grading plan shall be prepared, stamped, and signed by a California registered Civil Engineer.
- **5.7-6:** A soils report shall be prepared by a qualified engineer licensed by the State of California to perform such work.
- 5.7-7: If any paleontological resource (i.e. plant or animal fossils) are encountered before or during grading, the developer shall retain a qualified paleontologist to monitor construction activities, and take appropriate measures to protect or preserve them for study. The paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:
 - Assign a paleontological monitor, trained, and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full-time during the interval of earth-disturbing activities.
 - Should fossils be found within an area being cleared or graded, divert earthdisturbing activities elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor should immediately divert construction and notify the monitor of the find.
 - Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (i.e., San Bernardino County Museum).
 - Submit summary report to City of Rancho Cucamonga. Transfer collected specimens with a copy to the report to San Bernardino County Museum.

Greenhouse Gas Emissions

There are no standard conditions of approval that reduce greenhouse gas emissions.

Hazards and Hazardous Materials

5.9-1: Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbeques and grills, and firebreak fuel

modification areas are imposed on new developments.

Hydrology and Water Quality

- **5.10-1:** A final drainage study shall be submitted to and approved by the City Engineer prior to final map approval or the issuance of building permits, whichever occurs first. All drainage facilities shall be installed as required by the City Engineer.
- **5.10-2:** Adequate provisions shall be made for acceptance and disposal of surface drainage entering the property from adjacent areas.

Land Use and Planning

There are no standard conditions of approval that reduce land use and planning impacts.

Mineral Resources

There are no standard conditions of approval that reduce mineral resource impacts.

Noise

- 5.13-1: For construction activities that do not involve pile driving occurring within 580 feet residential, schools, churches, or similar uses or within 330 feet of commercial/industrial uses or for construction activities involving pile driving occurring within 1,000 feet of residential, schools, churches, or similar uses, or within 330 feet of commercial/industrial uses, or nighttime construction activities, as defined in Development Code Section 17.66.050), the City shall require that project applicants prepare a site-specific construction noise analysis demonstrating compliance with the noise standards of Development Code Section 17.66.050, as determined by the City. The analysis shall be completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, restrictions on construction timing to avoid nighttime hours, restrictions on the location of equipment and vehicle use within the construction site, installing noise mufflers on construction equipment, use of electric-powered vehicles and equipment, use of sound blankets on construction equipment, and the use of temporary walls or noise barriers to block and deflect noise.
- 5.13-2: To avoid or substantially lessen exposure to substantial permanent increases in traffic noise, the City shall, at the time of development application submittal, require the preparation of a traffic noise study that includes (1) the evaluation of potential traffic noise impacts of new noise sources (e.g., project-generated traffic noise increases) on nearby existing noise sensitive receptors (such as residential neighborhoods) and (2) require noise reduction measures (e.g., sound walls, rubberized asphalt) to prevent exposure of noise sensitive receptors to substantial noise increases, consistent with Table N-1 and incremental increase standards of no greater than 3 dB where existing levels are below 65 dBA CNEL, 1 dB where existing levels are between 70 dBA CNEL and 75 dBA and any increase where existing levels are above 75 dBA CNEL, as determined by the City.

- 5.13-3: The City shall require that project applicants analyze and mitigate potential noise impacts from new stationary noise sources (e.g., loading docks at commercial and industrial uses, mechanical equipment associated with all building types), to, as determined by the City, comply with the City's daytime (7:00 a.m. to 10:00 p.m.) standards of 65 dBA L_{eq}/50 dBA L_{eq} (exterior/interior) and nighttime (10:00 p.m.-7:00 a.m.) standards of 60 dBA L_{eq}/45 dBA L_{eq} (exterior/interior), described in Development Code Section 17.66.050(F). The analysis shall be prepared by a qualified acoustical engineer or noise specialist and completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, the use of enclosures or screening materials (e.g., landscape buffers, parapets, masonry walls) around stationary noise sources (e.g., heating, ventilation, and air conditioning systems, generators, heating boilers, loading docks) or of noise suppression devices (e.g., acoustic louvers, mufflers).
- 5.13-4a: The City shall, at the time of development project application submittal, evaluate the compatibility of proposed noise sensitive uses (e.g., residences, lodging, schools, parks) with the noise environment to ensure noise compatibility standards (Table N-1) are met.
- 5.13-4b: Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, prioritize site planning that reduces noise exposure over other attenuation measures, particularly the location of parking, ingress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.
- 5.13-4c: Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, incorporate building orientation, design, and interior layout into the project to achieve compatible noise levels. For example, noise insulation materials (e.g., double-glazed windows and well-sealed doors) substantially lessen interior noise levels. In addition, interior building layouts that place active rooms, such as kitchens, between noise-sensitive rooms, such as bedrooms, and exterior noise sources, such as roadways, substantially lessen interior noise levels within the noise-sensitive rooms.
- **5.13-4d:** The City shall require that mixed-use development be designed to minimize exposure of noise-sensitive uses from adjacent noise sources and require full disclosure of the potential noise impacts of living in a mixed-use development by requiring residential disclosure notices within deeds and lease agreements as a condition of project approval.
- 5.13-4e: The City shall review and comment on transportation capital projects and operations sponsored by Caltrans and other agencies to minimize exposure of noise-sensitive uses within the city to adverse levels of transportation-related noise, including noise associated with freeways, major arterials, bus transit, and rail lines.

- 5.13-5a: For development involving construction activities within 500 feet of existing sensitive land uses (places where people sleep or buildings containing vibration-sensitive uses), the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analysis that identifies vibration-reducing measures to ensure the project construction does not exceed applicable vibration criteria (e.g., FTA, Caltrans) for the purpose of preventing disturbance to sensitive land uses and structural damage. The analysis shall include, but is not limited to, the following requirements:
 - Ground vibration-producing activities, such as pile driving, shall be limited to the daytime hours between 7:00 a.m. to 8:00 p.m. on weekdays and prohibited on Sundays and holidays.
 - If pile driving is used, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile.
 - Maximize the distance between construction equipment and vibration-sensitive land uses.
 - Earthmoving, blasting and ground-impacting activities shall be prohibited from occurring at the same time if simultaneous activity would result in exceedance of vibration criteria.
 - Where pile driving is proposed, alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, nondisplacement piles, pile cushioning, torque or hydraulic piles) shall be implemented when the project cannot otherwise demonstrate vibration levels in compliance with the structural damage threshold.
 - Minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving) for the purpose of preventing damage to nearby structures shall be established. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (100 feet for pile driving, 25 feet for other construction activity) can be revised only if a project-specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that demonstrates, as determined by the City, that the structural damage vibration threshold would not be exceeded.
 - Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving) for the purpose of preventing negative human response shall be established based on the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the type of sensitive receptor. Established setback requirements (500 for pile driving, 80 for other construction) can be revised only if a project-specific ground vibration study demonstrates, as determined by the City, that receptors would not be exposed to ground vibration levels in excess of negative human response vibration threshold levels, depending on the frequency of the event and receiver type.

- All vibration-inducing activity within the established setback distances for preventing structural damage and negative human response shall be monitored and documented to compare recorded ground vibration noise and vibration noise levels at affected sensitive land uses to the applicable vibration threshold values. The results included recorded vibration data shall be submitted to the City.
- 5.13-5b: For projects proposed within 600 feet of commuter rail/high-speed rail/freight rail, or rail with combined services, the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analyses to evaluate vibration exposure from nearby transit sources. The vibration assessment shall be prepared by a qualified acoustical engineer or noise specialist in accordance with Federal Transit Administration (FTA) vibration impact criteria, or other applicable City policy in place at the time of project application submittal. The assessment shall determine vibration levels at specific building locations and identify structural mitigation measures (e.g., isolation strip foundations, insulated windows and walls, sound walls or barriers, distance setbacks, or other construction or design measures) that would reduce vibration to acceptable levels for the receptor and source type.
- **5.13-5c:** The City shall evaluate new transportation capital projects and operations sponsored by other agencies for structural vibration impacts and vibration annoyance impacts, consistent with City-approved methodologies (e.g., Caltrans, FTA guidance).

Population and Housing

There are no existing regulations that reduce impacts on population and housing.

Public Services

There are no existing regulations that reduce impacts to fire protection services and facilities, police protection services and facilities, school facilities, and library services and facilities.

Recreation

There are no existing regulations that reduce impacts to recreational facilities.

Transportation

5.17-1: Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.

- **5.17-2:** Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register with the SCAQMD to implement an emission reduction program, in accordance with this Rule.
- **5.17-3:** Individual projects shall provide the following, as determined applicable by City staff:
 - Provide car-sharing, bike sharing, and ride-sharing programs;
 - Improve or increase access to transit;
 - Incorporate neighborhood electric vehicle networks into the project;
 - Include project measures to reduce transportation requirements such as work from home and flexible work schedules;
 - Link to existing pedestrian or bicycle networks, or transit service; and/or
 - Provide traffic calming.

Tribal Cultural Resources

- 5.18-1: Inadvertent Archeological Find. If during ground disturbance activities, cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Cultural resources are defined as being multiple artifacts in close association with each other, but also include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).
 - a. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Planning Director to discuss the significance of the find.
 - b. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
 - c. Grading or further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.
 - d. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Locations Condition.

- e. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the project archaeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.
- f. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and tribal cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or tribal cultural resources, these issues will be presented to the Planning Director for decision. The City's Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological and tribal cultural resources, recommendations of the project archaeologist, and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision and/or City Council.
- 5.18-2: Cultural Resources Disposition. In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:
 - a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Rancho Cucamonga Planning Department:
 - i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.
 - ii. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recording has been completed, with an exception that sacred items, burial goods, and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request.
 - iii. If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a San Bernardino County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees by the Applicant necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological

materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods, and Native American human remains, as defined by the cultural and religious practices of the Most Likely Descendant. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.

- 5.18-3: Archaeologist Retained. Prior to issuance of a grading permit the project applicant shall retain a gualified Registered Professional Archaeologist (RPA), to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources. The Registered Professional Archaeologist and the Tribal monitor(s) shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The Registered Professional Archaeologist and the Tribal monitor(s), shall independently have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors. The developer/permit holder shall submit a fully executed copy of the contract to the Planning Department to ensure compliance with this condition of approval. Upon verification, the Planning Department shall clear this condition. In addition, the Registered Professional Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB 52 to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:
 - a. Project grading and development scheduling;
 - b. The Project archaeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors, and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;

- c. The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.
- 5.18-4: Native American Monitoring. Tribal monitor(s) shall be required on-site during all ground-disturbing activities, including grading, stockpiling of materials, engineered fill, rock crushing, etc. The land divider/permit holder shall retain a qualified tribal monitor(s) from the requesting Tribe. Prior to issuance of a grading permit, the developer shall submit a copy of a signed contract between the Tribe and the land divider/permit holder for the monitoring of the project to the Planning Department and to the Engineering Department. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.
- 5.18-5: Archeology Report Phase III and IV. Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Planning Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).
- 5.18-6: Human Remains. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Bernardino County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the San Bernardino County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

5.18-7: Non-Disclosure of Reburial Locations. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

Utilities and Service Systems

There are no existing regulations that reduce impacts to wastewater treatment and collection, water supplies and distribution systems, storm drainage systems, and solid waste facilities.

Wildfire

5.9-1: Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbeques and grills, and firebreak fuel modification areas are imposed on new developments.

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2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This draft environmental impact report (EIR) has been prepared to satisfy CEQA and has been prepared consistent with the CEQA Guidelines. The EIR is the public document designed to provide decision makers and the public with an analysis of the potential environmental effects of the project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR also discloses significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (CEQA § 21067). The City of Rancho Cucamonga has the principal responsibility for approval of the project. For this reason, the City of Rancho Cucamonga is the CEQA lead agency for this project.

2.2 BASELINE EXISTING CONDITIONS ASSUMED IN THE ANALYSIS

Each resource chapter in this Draft EIR (see Chapters 5.1 through 5.20) summarizes the environmental setting specific to that resource topic. The environmental setting summary is based on information that was prepared as part of the Existing Conditions Reports that are incorporated by reference into this Draft EIR, and accessible at: https://www.cityofrc.us/GeneralPlan, and as Appendix 2-1 to this EIR.

2.3 NOTICE OF PREPARATION

The City of Rancho Cucamonga has determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on May 10, 2021 (Appendix 2-2). The NOP process is used to help determine the scope of the environmental issues to be addressed in the EIR. Comments received during the NOP public review period from May 10, 2021 through June 9, 2021, are included in Appendix 2-2 and summarized in Table 2-1, NOP Comment Letters and Scoping Meeting Summary.

Six agencies/interested parties responded to the NOP. The City hosted a public scoping meeting on May 18, 2021. This EIR has taken the responses to the NOP into consideration; however, CEQA does not require a formal response to the comments.

Table 2-1	NOP Comment Letters and Scoping Meeting Summary
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Agency/ Organization/ Individual	Date	Summary of Comments	Section of EIR Comment is Addressed
Southern California Edison (SCE)	6/9/2021	 Requests that the City eliminate the eventual development of new streets located northwest of the intersection of 6th Street and Etiwanda Avenue from consideration 	5.20 Utilities 5.17 Transportation
		• Requests to consider the proposed General Plan Amendment in relation to SCE's long-term use of its properties adjacent to proposed new streets and provide an alternative that does not disrupt existing electrical infrastructure.	
Southern Regional Council	6/8/2021	Requests that the City should require use of local skilled workers.	N/A: not a CEQA issue
of Carpenters (Carpenter)		• Requests that the City should require trained workforce and workers who have graduated from Joint Labor Management apprenticeship training program approved by the State of California or have on-the-job training experience required to graduate from such state apprenticeship training program.	
California Department of Fish and Wildlife (CDFW)	6/11/2021	• Request that the DEIR include a complete assessment of the flora and fauna within and adjacent to the project site, with particular emphasis on rare, threatened, endangered, and other sensitive species and their habitats by a qualified biologist and include seasonal variation.	5.4 Biological resources addresses flora and fauna in the City and SOI. However, due to the programmatic nature of the analysis, not
		• Requests that the DEIR include an assessment and an identifying map of various habitat types which would include adjoining habitat areas and offsite habitats that could be directly or indirectly affected. The assessment and map should follow <i>The Manual of California Vegetation</i> , second addition.	all topics were addressed at the level of specificity or detail as requested, but may be at future project-level environmental analyses.
		• Requests that the DEIR include a general biological inventory of fish, amphibian, reptile, bird, and mammal species within the project area and adjacent to the project area.	
		Requests that the California Natural Diversity Database	

Agency/ Organization/ Individual	Date	Summary of Comments	Section of EIR Comment is Addressed
		(CNDDB) be contacted to obtain current information on previously reported or identified sensitive species of habitat and contact additional relevant databases.	
		• Request that the City follow the recommendations and guidelines in the <i>Staff Report on Burrowing Owl Mitigation</i> which include habitat assessment, surveys, and an impact assessment.	
		• Requests that the DEIR include a floristic-based assessment of special status plants and natural communities.	
		• Requests that the DEIR include information on the regional setting with an emphasis on rare or unique resources within the region.	
		• Request that the DEIR identify all open space and mitigation/conservation land within and adjacent to the project area.	
		• Requests that the DEIR analysis include a discussion of potential impacts from lighting, noise, human activity, defensible space, and wildlife-human interactions.	
		• Requests that the DEIR analysis include a discussion of changes to drainage patterns within and adjacent to the project site.	
		• Requests that the DEIR analysis include a discussion of potential indirect project impacts on biological resources adjacent to the project site.	
		• Requests that the DEIR analysis include an evaluation of impacts adjacent to open space from the project.	
		• Requests that the DEIR analysis include a cumulative effects analysis of direct and indirect impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors, aquatic habitats, sensitive species, open lands, open space, and adjacent natural habitats.	

Agency/ Organization/ Individual	Date	Summary of Comments	Section of EIR Comment is Addressed
		• Recommends identifying mitigation measures or alternatives for fully protected species, sensitive plant communities, California species of special concern, habitat revegetation/restoration plans, Nesting Birds and Migratory Treaty Act, moving out of harm's way, and translocation of species.	
		• Recommends fully identifying the potential impacts to lake, stream, or riparian resources and provide avoidance, mitigation, monitoring, or reporting to facilitate issuance of an LSA agreement.	
		• Recommends water-wise concepts in the project landscape, including native California species and water efficient irrigation systems.	
San Bernardino County Department of Public Works	6/2/2021	• Requests discussion of impacts and mitigation in the DEIR for the Flood Zones A, AO, D, X, X-shaded.	5.10 Hydrology
Center for Community Action and Environmental Justice (CCAEJ)	6/11/2021	• Requests that the EIR process include a study of significant areas located in EJ communities, including mitigation and analysis within discussion of various issue areas.	Environmental Justice Strategy in the Supportive Appendices to the General Plan
South Coast Air Quality Management	6/1/2021	 Request that the air quality and GHG emissions impact analysis utilize the SCAQMD's CEQA Air Quality Handbook and website, including thresholds of significance. 	5.3 Air Quality and 5.8 Greenhouse Gases
District (SCAQMD)		• Request that the air quality and GHG emissions impact analysis compare emissions to SCAQMD's CEQA regional pollutant emissions significance threshold and localized significance threshold.	
		Request that the air quality and GHG emissions impact analysis identify any potential adverse air quality impacts that	

Agency/ Organization/ Individual	Date	Summary of Comments	Section of EIR Comment is Addressed
		could occur from all phases of the proposed project.	
		 Requests that a mobile source health risk assessment be completed if the project generates diesel emissions from long-term construction. 	
		• Recommend reviewing the CARB Air Quality and Land Use Handbook; A Community Health Perspective and SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.	
		• Recommend using resources for mitigation measures guidance, such as SCAQMD's CEQA Air Quality Handbook, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 Air Quality Management Plan, and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.	

2.4 SCOPE OF THIS EIR

The City determined the scope for this EIR based on review of the proposed General Plan, agency consultation, the Notice of Preparation (NOP), and comments in response to the NOP. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the EIR should identify any potentially significant adverse impacts to the environment and incorporate mitigation that would reduce or eliminate these impacts to levels of insignificance.

This EIR evaluates potential impacts associated with implementation of the General Plan Update. The information in Chapter 3, *Project Description*, establishes the basis for analyzing future project-related environmental impacts in this EIR. General Plan Update policies and programs, existing regulations, and mitigation measures have been identified that either eliminate or reduce potentially significant impacts. The focus of the impact analysis is on areas that propose physical changes to the existing environment that may result in environmental impacts (e.g., areas where land use changes are proposed) and on ensuring that development and improvement activities are consistent with the General Plan Update. In addition, the EIR describes a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project while substantially avoiding or lessening any of the significant impacts of the project and evaluates the comparative merits of the alternatives and the project.

2.4.1 STRUCTURE

Each resource chapter presents an evaluation of a particular environmental topic and includes a summary of existing conditions (both physical and regulatory), potential environmental impacts of the General Plan Update on the resource, project design features, including standard of conditions of approval, that avoid significant environmental impacts, mitigation measures proposed to reduce significant environmental impacts (where necessary), and a determination of the level of significance after mitigation measures are implemented. As a General Plan, the mitigation measures will often be a policy that requires a later action when a development proposal is under consideration. The analysis may also use compliance with federal and state permit requirements and regulations, or existing development code to address a specific impact. Each chapter will follow the same outline:

Resource Title

An introduction of the specific environmental resource evaluated in the chapter.

Chapter Overview

A short explanation of the chapter findings.

Heart of the Matter

A discussion of how the environmental impacts identified in the chapter affect people.

Environmental Setting

This subsection provides summary information about the existing physical environment related to the resource topic. In accordance with State CEQA Guidelines Section 15125, the discussion of the physical environment describes existing conditions in the Planning Area at the time the NOP was filed in May 2021. The basis for the environmental setting is the information in the existing conditions reports.

Regulatory Background

This subsection summarizes federal, state, regional, and local plans, policies, laws, and regulations that apply to the resource. Also included will be a listing of standard conditions of approval that the City applies to, or will apply to, development projects in accordance with the General Plan Update and that also address environmental impacts.

Thresholds of Significance

The thresholds of significance that will serve as the basis for judging impact significance are identified in each resource section. Thresholds of significance used for the evaluation of impacts include those thresholds currently used by the City when reviewing individual projects. While based on Appendix G of the CEQA Guidelines, the City may use different thresholds for some resource areas to reflect existing conditions or planned future conditions. If an alternative threshold is evaluated, it will be explained in the analysis.

Proposed General Plan Goals and Policies

The proposed General Plan includes several policies that will address environmental impacts. This section of the chapter will list the policies specifically referenced in the environmental analysis as reducing or eliminating a potential environmental impact.

Environmental Impacts

The discussion of impacts describes potential consequences to each resource that would result from implementation of the General Plan update. Potential environmental impacts have been classified in the following categories:

- The term **no impact** is used when the environmental resource being discussed would not or may not be adversely affected by implementation of the General Plan Update. This impact level does not require mitigation.
- A less than significant impact would or may cause a minor but acceptable adverse change in the physical environment. This impact level does not require mitigation under CEQA.
- A significant and unavoidable impact would or may cause a substantial adverse effect on the environment, and no known feasible mitigation measures are available to reduce the impact to a less than significant level, or implementation of feasible mitigation measures would not reduce impacts to a less than significant level. Under CEQA, a project with significant and unavoidable impacts could proceed, but the City would be required to prepare a statement of overriding considerations in accordance with State CEQA Guidelines Section 15093, explaining why the City would proceed with the project despite potential for significant impacts.

Cumulative Impacts

This section evaluates the potential cumulative impacts considering that impacts may extend beyond the planning area, while others will be localized to the city or possibly only small areas of the city. A General Plan EIR is primarily a cumulative analysis of the potential environmental impacts of implementing the General Plan.

2.4.2 IMPACTS CONSIDERED LESS THAN SIGNIFICANT OR REDUCED TO LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF STANDARD CONDITIONS OF APPROVAL

The EIR identified the following impacts as less than significant, no impact, or potentially significant impacts which would be reduced to less than significant with the implementation of standard conditions of approval idenfied in the EIR:

Aesthetics

- Impact 5.1-1: Development in accordance with the General Plan Update would not substantially alter or damage scenic vistas or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. [Thresholds AE-1 and AE-2]
- Impact 5.1-2: Buildout in accordance with the proposed land use plan would alter the existing visual appearance of the City and SOI, but would not substantially degrade its existing visual character or quality. [Threshold AE-3]
- Impact 5.1-3: Development in accordance with the General Plan would generate additional light and glare. [Threshold AE-4]

Agriculture and Forestry Resources

- Impact 5.2-2: The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. [Threshold AG-2]
- Impact 5.2-3: The proposed project would not conflict with zoning for forest land or timberlands, and would not result in the loss of forest land. [Thresholds AG-3 and AG-4]

Air Quality

- Impact 5.3-1: The proposed project would not conflict with or obstruct implementation of the 2016 Air Quality Management Plan. [Threshold AQ-1]
- Impact 5.3-4: The proposed project would not result in short- or long-term increases in localized CO emissions that would exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]

 Impact 5.3-6: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. [Threshold AQ-4]

Biological Resources

- Impact 5.4-2: Implementation of the proposed General Plan Update could impact sensitive natural communities, including wetlands and riparian habitat [Thresholds B-2 and B-3]
- Impact 5.4-3: Development pursuant to the proposed General Plan Update would not adversely impact wildlife movement in and surrounding the Plan Area. [Threshold B-4]
- Impact 5.4-4: The proposed project would not conflict with a conservation plan and would be required to comply with applicable policies governing biological resources. [Thresholds B-5 and B-6]

Cultural Resources

- Impact 5.5-2: Future development in the City that would be accommodated by the General Plan Update could impact known and unknown archaeological resources. [Threshold C-2]
- Impact 5.5-3: Grading activities could potentially disturb human remains. [Threshold C-3]

Energy

- Impact 5.6-1: Implementation of the General Plan Update would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. [Threshold E-1]
- Impact 5.6-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy efficiency. [Threshold E-2]

Geology and Soils

- Impact 5.7-1: Project occupants and visitors would be subject to potential seismicrelated hazards. [Threshold G-1 i-iv])
- Impact 5.7-2: Unstable geologic unit or soils conditions, including soil erosion, could result from development of the project. [Thresholds G-2, G-3 and G-4]
- Impact 5.7-3: Soil conditions could result in risks to life or property and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. [Thresholds G-3 and G-4]
- Impact 5.7-4: Soil conditions may not adequately support septic tanks. [Threshold G-5]

■ **Impact 5.7-5**: The project would not directly or indirectly destroy a unique paleontological resource or unique geologic feature. [Threshold G-6]

Greenhouse Gas Emissions

- Impact 5.8-1: The proposed project would not directly or indirectly result in an increase in GHG emissions compared to existing conditions. [Threshold GHG-1]
- Impact 5.8-2: The proposed project would not conflict with the SCAG region's achievement of SB 375 emissions reduction targets. [Threshold GHG-2]
- **Impact 5.8-3**: The proposed project would be consistent with the State's ability to achieve the 2030 reduction target of SB 32. [Threshold GHG-2]

Hazards and Hazardous Materials

- Impact 5.9-1: Project construction and operations of the proposed project could involve the transport, use, and/or disposal of hazardous materials; however, compliance with existing local, state, and federal regulations would ensure impacts are minimized. [Thresholds H-1, H-2, and H-3]
- Impact 5.9-2: The project site is not on a list of hazardous materials sites. [Threshold H-4]
- Impact 5.9-3: The project site is not located in the vicinity of an airport or within the jurisdiction of an airport land use plan. [Threshold H-5]
- Impact 5.9-4: Project development would not affect the implementation of an emergency responder or evacuation plan. [Threshold H-6]

Hydrology and Water Quality

- Impact 5.10-1: Development pursuant to the General Plan would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. [Threshold HYD-1]
- Impact 5.10-2: Buildout of the General Plan would generate a substantial increase in water demand but would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. [Threshold HYD-2]
- Impact 5.10-3: Development pursuant to the General Plan would increase impervious surfaces and therefore could alter drainage patterns, but would not increase the potential for erosion and siltation on- or off-site, or create runoff water that would exceed the capacity of storm drain systems, or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. [Threshold HYD-3 (i), (ii), (iii), and (iv)]
- Impact 5.10-4: The proposed project would not result in flood hazards associated with flood zones, tsunami, or seiche zones, or due to dam inundation. [Threshold HYD-4]

 Impact 5.10-5: Buildout of the General Plan would not obstruct or conflict with the implementation of a water quality control plan or sustainable groundwater management plan. [Threshold HYD-5]

Land Use and Planning

- Impact 5.11-1: Project implementation would not divide an established community. [Threshold LU-1]
- **Impact 5.11-2**: Project implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]

Mineral Resources

 Impact 5.12-1: Project implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. [Threshold M-1 and M-2]

Noise

 Impact 5.13-3: The project could generate a substantial permanent increase in stationary noise at noise-sensitive uses that exceeds City standards. [Threshold N-3]

Population, Housing, and Employment

- Impact 5.14-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). [Threshold P-1]
- Impact 5.14-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. [Threshold PH-2]

Public Services

- Impact 5.15-1: The proposed project would introduce new structures, residents, and workers into the Rancho Cucamonga Fire Protection District's service boundaries, thereby increasing the requirement for fire protection facilities and personnel. [Threshold FP-1]
- Impact 5.15-2: The proposed project would introduce new structures, residents, and workers into SBSD's service boundaries, thereby increasing the requirement for police protection facilities and personnel. [Threshold PP-1]
- Impact 5.15-3: The proposed project would not generate new students who would impact the school enrollment capacities of area schools. [Threshold SS-1]

 Impact 5.15-4: The proposed General Plan Update would not result in a substantial adverse physical impact related to construction of facilities for the provision of library services. [Threshold LS-1]

Recreation

- **Impact 5.16-1**: The proposed project would generate additional residents that would increase the use of existing park and recreational facilities. [Threshold R-1]
- Impact 5.16-2: Project implementation would result in environmental impacts to provide new and/or expanded recreational facilities. [Threshold R 2]

Transportation

- Impact 5.17-1: The proposed project potentially creates an inconsistency with the adopted RTP/SCS which notes a future interchange at Arrow Route and I-15. [Threshold B-1]
- Impact 5.17-3: The project would not substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [T-3]
- Impact 5.17-4: The project would not result in inadequate emergency access. [T-4]

Tribal Cultural Resources

 Impact 5.18-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). [Threshold TCR 1]

Utilities and Service Systems

- Impact 5.19-1: Sewer and wastewater treatment systems are adequate to meet project requirements. [Thresholds U-1 (part) and U-3]
- Impact 5.19-2: Water supply and delivery systems are adequate to meet project requirements. [Thresholds U-1 (part) and U-2]
- Impact 5.19-3: Existing and/or proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project. [Threshold U-1 (part)]
- Impact 5.19-4: Existing and/or proposed facilities would be able to accommodate project-generated solid waste. [Thresholds U-4]
- Impact 5.19-5: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. [Thresholds U-5]

Wildfire

- **Impact 5.20-1**: Buildout of the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. [Threshold W-1]
- Impact 5.20-2: The proposed project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors, thereby exposing project occupants to elevated particulate concentrations from a wildfire. [Threshold W-2]
- Impact 5.20-3: The proposed project would require the installation and maintenance of associated infrastructure in areas that are undeveloped or vacant, which could exacerbate fire risk or result in temporary or ongoing impacts to the environment. [Threshold W-3]
- Impact 5.20-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. [Threshold W-4]

2.4.3 UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

This EIR identifies significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. The City must prepare a "statement of overriding considerations" before it can approve the project, attesting that the decision-making body has balanced the benefits of the project against its unavoidable significant environmental effects and has determined that the benefits outweigh the adverse effects, and therefore the adverse effects are considered acceptable. The impacts that were found in the EIR to be significant and unavoidable are:

Agriculture and Forestry Resources

 Impact 5.2-1: The proposed project would convert Farmland to non-agricultural uses, but would not result in the conversion of forest land to non-forest uses. [Thresholds AG-1 and AG-5]

Air Quality

- Impact 5.3-2: The proposed project would cause construction-generated criteria air pollutant or precursor emissions to exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]
- Impact 5.3-3: The proposed project would result in a net increase in long-term operational criteria air pollutant and precursor emissions that exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]
- Impact 5.3-5: The proposed project would expose sensitive receptors to substantial increases in toxic air contaminant emissions. [Threshold AQ-3]

Biological Resources

• Impact 5.4-1: Buildout of the proposed Land Use Plan would impact sensitive plant and animal species known to occur in the City of Rancho Cucamonga. [Threshold B-1]

Cultural Resources

 Impact 5.5-1: Buildout of the City of Rancho Cucamonga General Plan could impact historic resources. [Thresholds C-1]

Greenhouse Gas Emissions

 Impact 5.8-4: The proposed project would be inconsistent with the State's ability to achieve the long-term reduction goals or Executive Orders S-3-05, B-30-15, and B-55-18. [Threshold GHG-2]

Noise

- Impact 5.13-1: Construction activities would result in temporary noise increases in the vicinity of the future development under the General Plan. [Threshold N-1]
- Impact 5.13-2: Project implementation could generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess local standards. [Threshold N-2]
- Impact 5.13-4: Expose new sensitive land uses to noise levels in excess of the noise compatibility standards identified in 2040 General Plan Noise Element Table N-1. [Threshold N-4]
- Impact 5.13-5: Future development under the General Plan could generate short-term construction vibration or exposure to new sensitive land uses to long-term operational vibration sources that exceed City thresholds. [Threshold N-5]

Transportation

 Impact 5.17-2: The project may be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. [Threshold B-2]

2.5 INCORPORATION BY REFERENCE

Some documents are incorporated by reference into this EIR, consistent with Section 15148 and Section 15150 of the CEQA Guidelines, and they are available for review at the City.

City of Rancho Cucamonga Municipal Code

2.6 AVAILABILITY

Notification of availability of EIR for review was distributed to public agencies and members of the public who expressed an interest in receiving the document. An electronic copy of the EIR and associated Notice of Completion was sent to the California Office of Planning and Research (OPR) Clearinghouse for distribution pursuant to CEQA Guidelines 15087.

The EIR is available to the general public for review at various locations:

- On the City's website: https://www.cityofrc.us/GeneralPlan
- In person at the City of Rancho Cucamonga, Planning Department: 10500 Civic Center Drive, Rancho Cucamonga, California 91730
- Archiblad Library, 7368 Archibald Ave., Rancho Cucamonga, CA 91730
- Paul A. Baine Library, 12505 Cultural Center Dr., Rancho Cucamonga, CA 91739

This EIR is being circulated for public review for 45 days. Interested agencies and members of the public are invited to provide written comments on the EIR to the City address shown on the title page of this document.

2.7 FINAL EIR CERTIFICATION

A Final EIR (FEIR) will incorporate the received comments, responses to the comments, and any changes to the EIR that result from comments. The FEIR will be presented to the City for potential certification as the environmental document for the project. All persons who comment on the EIR will be notified of the availability of the FEIR and the date of the public hearing before the City.

2.8 MITIGATION MONITORING

Public Resources Code Section 21081.6 requires that agencies adopt a mitigation monitoring and reporting program for any project for which it has made findings pursuant to Public Resources Code Section 21081. Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR.

The CEQA Guidelines Section 15097(b) states that "Where the project at issue is the adoption of a general plan, specific plan, community plan or other plan-level document (zoning, ordinance, regulation, policy), the monitoring plan shall apply to policies and any other portion of the plan that is a mitigation measure or adopted alternative. The monitoring plan may consist of policies included in plan-level documents. The annual report on general plan status required pursuant to the Government Code is one example of a reporting program for adoption of a city . . . general plan." California Government Code Section 65400(a)(2) requires the City to provide a report each year by April 1st, to the state Office of Planning and Research and Housing and Community Development on the progress of implementing the General Plan, particularly those elements relating to housing. As this General Plan contains policies that also address environmental impacts identified in this EIR, the annual report will serve as the

reporting program for the City. However, as noted below, a Mitigation Monitoring and Reporting Program is proposed to be included with this EIR.

2.9 INTENDED USES OF THE EIR

This is a Program EIR that examines the potential environmental impacts of the proposed General Plan Update. This DEIR also addresses various actions by the City to adopt and implement the General Plan. This EIR serves as a Program EIR under CEQA Guidelines section 15168. According to CEQA Guidelines 15168(b), use of a program EIR can provide advantages, including:

(1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,

(2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,

(3) Avoid duplicative reconsideration of basic policy considerations,

(4) Allow the Lead Agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and

(5) Allow reduction in paperwork.

As a Program EIR, this document focuses on the overall effects of the proposed General Plan within proposed areas of change. The analysis does not examine the effects of any potential specific projects that may occur during the lifespan of the proposed General Plan. Further, the nature of general plans is such that some proposed policies are intended to be more qualitative, with specific details to be determined upon development of a specific project. No development or subdivision maps are being requested as a part of this project. All individual development or map applications will be subject to project-specific CEQA review. Any impacts associated with subdivision or development that are not fully evaluated within the scope of this EIR may require further environmental analysis. However, the City envisions that this Program EIR may be used to eliminate or reduce the scope of future environmental review for individual projects that are consistent with the General Plan Update pursuant to CEQA Guidelines Section 21083.3 and other streamlining provisions authorized by CEQA.

It is the intent of the DEIR to evaluate the environmental impacts of the project, thereby enabling the City, other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are:

- Certification of the Program EIR
- Adoption of the Rancho Cucamonga General Plan Update
- Adoption of the Climate Action Plan (CAP)
- Adoption of the Findings of Fact and Statement of Overriding Considerations
- Adoption of a revised development code, ordinances, guidelines, programs, actions, or other mechanisms that implement the Rancho Cucamonga General Plan Update

3. Project Description

3.1 PROJECT LOCATION

The City of Rancho Cucamonga is in the Inland Empire in southwestern San Bernardino County, California. The City is surrounded by developed municipalities to the west, south, and east including the cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the north and east. The northernmost portion of the City's Sphere of Influence is adjacent to the San Bernardino National Forest. Interstate and regional access to the City is provided by Interstate 15 (I-15), which runs in a general north-south direction and bisects the eastern portion of the City, and by State Route 210 (SR-210), an east-west freeway that runs through the center of the City. The I-10 freeway also provides regional access and is located approximately 0.75-mile south of the City boundary. Figure 1-1, *Regional Location*, and Figure 1-2, *Citywide Aerial*, show the General Plan Area in its regional and local contexts.

3.2 STATEMENT OF OBJECTIVES

Objectives for the City of Rancho Cucamonga General Plan Update will aid decision makers in their review of the project and associated environmental impacts:

- 1. Provide a human-scaled design, with buildings and outdoor spaces oriented towards people connected by safe and comfortable streets, pathways, and trails that provide equitable access for all.
- 2. Focus transformative growth along major corridors and allowing incremental change in the neighborhoods.
- 3. Increase jobs in the City to encourage more residents to work locally and reduce commuting out of the City to work.
- 4. Maintain and enhance conservation areas.
- 5. Create vibrant activity nodes and a "real downtown" with one or several major activity centers, with varied cultural opportunities and public art providing areas for social, civic, and commercial activity.

3.3 PROJECT CHARACTERISTICS

3.3.1 OVERVIEW OF THE PROJECT

The project is an update to the City of Rancho Cucamonga's adopted General Plan. The General Plan is a state-required legal document that provides guidance to decision-makers regarding the allocation of resources and determining the future physical form and character of development in the City and its SOI. It is the official statement of the City regarding the extent and types of development needed to achieve the community's physical, economic, social, and environmental goals. Although the General Plan is composed of individual sections, or "elements," that individually address a specific area of concern, the General Plan embodies a comprehensive and integrated planning approach for the jurisdiction. This section of the EIR only summarizes the General Plan Update components and the proposed General Plan, and supporting documentation, is included as Appendix 3-1 to this EIR, and available on the City's website: https://www.cityofrc.us/GeneralPlan.

As shown on Figure 3-1, *Degrees of Change Map*, much of the City will see very minor incremental changes when compared to the existing general plan. Transformative change is directed to specific areas of the city. Table 3-1 summarizes the major policy changes made by the proposed project when compared to the existing general plan. Overall, the proposed project is intended to improve on the land use pattern and development assumptions made for the existing general plan. The anticipated growth will be directed to focused areas of the community that are already designated for development.

General Plan	Policy Change
Volume 1 Vision Chapter 1: Vision & Core Values Chapter 2: Context Chapter 3: Administration Volume 2 Built Environment	 Emphasis on diversity and inclusion Expanding Healthy Communities Establshies "Big Ideas"
Chapter 1: Land Use & Community Character	 Recognizes and protects the places and character of neighborhoods Creates focus areas along major transportation routes Increases density/intensity for some focus areas Emphasis on pedestrian connectivity between neighborhoods
Chapter 2: Focus Areas	 Increases housing density and building intensity in some areas Emphasis on mobility and access Creates more urban spaces and destinations
Chapter 3: Open Space	 Emphasis on accessibility and connectivity Establishes a 10 minute ½ mile standard to reach open space Expands open space needs assessment to include new employees

Table 3-1 Overview of Policy Change

General Plan	Policy Change
Chapter 4: Mobility & Access	 Emphasis on completing roadway connections for safety and access Eliminates interchange at Arrow Route and I-15 Focus on complete streets and layered street network New roadway designs to support focus areas Supports transit options like high speed rail, tunnel to airport
Chapter 5: Housing	Meets new RHNA requirements
Chapter 6: Public Facilities & Services	Maintains servicesEmphasis on access and inclusivity
Volume 3 Environmental Performance Chapter 1: Resource Conservation Chapter 2: Safety Chapter 3: Noise	 Updated policies for safety and climate resiliency Recomments urban and rural noise thresholds Continued emphasis on conservation of natural areas
Volume 4 Implementation Strategy Chapter 1: General Plan Work Plan Chapter 2: Standard Conditions of Approval Chapter 3: Placemaking Toolkit Chapter 4: Climate Action Plan	 Provides roadmap for implementing plan Recommends development code changes Establishes conditions of approval for projects Establishes direction on how to develop Provides a plan for reducing greenhouse gas emissions

3.3.2 PROPOSED GENERAL PLAN

The General Plan Update is separated into four volumes that are subsequently divided into topical chapters. The content of the chapters corresponds to the requirements for the contents of a General Plan. While there is some overlap between the subject areas and the State requirements, the law allows the City to organize the topics in any fashion. The City has prepared a Climate Action Plan (CAP) as a companion to the General Plan that contains locally set GHG goals and can serve as a performance metric for later projects. The CAP provides more detailed implementation actions to reduce GHG emissions in accordance with the more general GHG reduction policy language provided in the General Plan.

Each chapter of the general plan begins with a brief overview of the contents followed by a summary of the legal requirements. As the legal requirements of a General Plan are lengthy and subject to change, they are not included verbatim. The legal requirement is followed by a section titled the "Heart of the Matter" that explains how the topic affects people. This section raises equity issues the City hopes to resolve and suggests methods of resolution. The human focus of Heart of the Matter helps set the foundation for the subsequent discussion leading to the goals and policies. Following the Heart of the Matter discussion are individual topical areas that are important to the chapter, including data, statistics, maps, graphs, and required points of discussion for each element of the General Plan. Each chapter concludes with goals and policies that direct action by the City to implement the vision and follow the core values of the City. Goals and policies are numbered so they can be easily referenced.

3.3.3 VOLUME 1 VISION AND CORE VALUES

This volume includes chapters that provide a context for the project, and a discussion of both a vision for the future and ideas that provide a foundation for the General Plan. The last chapter explains how the General Plan will be administered. While there are no goals and policies in this volume, the approach and expectation of the city is clearly articulated and used to form the remainder of the general plan.

3.3.4 VOLUME 2 BUILT ENVIRONMENT

The largest of the General Plan volumes is divided into six chapters:

3.3.4.1 Land Use and Community Character

Land use and community character focuses on the way the City looks and how it engages people. This includes natural features, such as the San Gabriel Mountains, tree-lined streets, or a special shopping district like Victoria Gardens. These are all places in the city that have been intentionally created to enhance community life. This Chapter of the General Plan preserves the character and strengths of each neighborhood and recommends appropriate change small in some cases, larger in others.

To support the design approach, the proposed project creates place types that increase dwelling unit and floor area ratio (FAR) for the focus areas. Implementation of the proposed project will require an update to the development code to reflect the new densities/intensites. In all instances future growth is anticipated within areas currently planned for development. The proposed project increases the allowalbe intensity of development rather than expanding outside of the current city limits. The area within the sphere of influence will stay rural as currently designated.

The General Plan Update uses five basic "place types" to guide vision-directed conservation and change as appropriate and express the development intention for each part of the city over the planning period. Each place type addresses a range of components—land use, built form, streetscapes, and building-to-street relationships—all of which are important in creating places, or "placemaking." The basic place types are defined as follows:

- Neighborhoods are predominantly residential and can include supporting amenities and services. Neighborhoods range from semi-rural neighborhoods, historic neighborhoods with stately tree rows, older neighborhoods interspersed with industrial business, and newer neighborhoods of single- and multi-family homes.
- Corridors are located along major streets in the City that connect neighborhoods, centers, districts, and open spaces. They are intended to provide smooth transitions between neighborhoods and districts, and provide a range of amenities, conveniences, transit access, and housing options on the edges of existing and future neighborhoods.
- Centers are places for shopping, dining, entertainment, and gathering as a community. They are nodes of activity throughout the City, providing retail and employment opportunities near neighborhoods, and in some cases also opportunities for new forms of housing.

- Districts are places where people work and conduct business. Districts are predominantly non-residential with a primary activity that is functionally specialized, such as a commercial, office, or industrial use, but can also include some supportive commercial and recreational uses and housing.
- Open spaces are places to play and learn, such as recreational parks, natural conservation areas, and schools. Community playfields, Central Park and the conserved natural and rural open spaces of the foothills are large, specialized areas. Small- and medium-size parks provide places for informal play, family activities, and quiet recreation, and are considered part of the neighborhood they serve.

Each of the above place types supported by goals and policies in the General Plan Update as well as narrative, tables, land use designations, and graphic illustrations of the expected development pattern. The projected growth over the next twenty years is guided into areas of the City that have the resources to accommodate it, or where the resources can be easily improved. This means that much of the community is expected to continue the incremental growth allowed by the existing general plan, with an encouragement to improve the connectivity of trails, paths, and roadways. Community design direction included in the General Plan Update requires that all new development connect to existing paths, trails, and roadways. Roadways are considered public realm and must be integrated into the design of the adjacent development. An important feature of all new development is that the street improvements be human scale and accommodate all modes of travel.

3.3.4.2 Land Use Designations

To accommodate the anticipated growth, the existing land use designations will be changed as shown in Table 3-2 so that buildings in the focus areas can have more units or cover more area providing for jobs and housing more people. The expectation is that by grouping intense development in the Focus Areas, the existing neighborhoods would not be substantially changed by future growth.

General Plan Designation		Density	Density (DU/AC)		Non-Residential Floor Area Ratio**	
		Proposed	Existing*	Proposed	Existing	Target Use Mix Ratio (Res/Non-Res
	NEIGHBORHOODS					
	Semi-Rural Neighborhood	Max. 2	0.1 – 2.0	NA	N/A	100/0
	Traditional Neighborhood	Max. 8	0.7 – 14.0	Max. 0.4	0.25 – 1.0	80/20
	Suburban Neighborhood - Very Low	Max. 6	0.1 – 14.0	NA	0.4 – 1.0	100/0
	Suburban Neighborhood - Low	Max. 14	2.0 – 24.0	NA	0.25 – 1.0	100/0
	Suburban Neighborhood - Moderate	Max. 30	14.0 – 30.0	NA	0.25 – 1.0	100/0
	Urban Neighborhood	20 - 50	0 – 50.0	0.2 - 0.4	0.25 – 1.0	80/20

Table 3-2: Existing and Proposed Land Use Designations

	Density (DU/AC)		Non-Residential Floor Area Ratio**		Target Use	
General Plan Designation	Proposed	Existing*	Proposed	Existing	Mix Ratio (Res/Non-Res	
CORRIDORS	-			-		
Neighborhood Corridor	Max. 24	2.0 - 30.0	0.4 - 0.6	0.25 – 1.0	70/30	
City Corridor - Moderate	24 - 42	8.0 - 24.0	0.4 - 1.0	0.25 – 1.0	70/30	
City Corridor - High	36 - 60	8.0 - 24.0	0.6 - 1.5	0.25 – 1.0	70/30	
CENTERS		1		1		
Neighborhood Center	Max. 24	0.1 - 24	0.2 - 0.4	0.25 – 1.0	20/80	
Traditional Town Center	Max. 30	2.0 - 30.0	0.2 - 0.6	0.25 – 1.0	50/50	
City Center	40 - 100	0 – 50.0	1.0 - 2.0	0.25 – 1.0	50/50	
DISTRICTS						
Office Employment District	18 - 30	0	0.6 - 1.0	0.40 – 1.0	20/80	
21st Century Employment District	24 - 42	0	0.4 - 1.0	0.25 – 1.0	30/70	
Neo-Industrial Employment District	14 - 24	0	0.4 - 0.6	0.40 – 1.0	10/90	
Industrial Employment District	NA	0	0.4 - 0.6	0.40 – 1.0	0/100	
OPEN SPACES						
Natural Open Space	NA	0.10 – 4.0	NA	0.10	NA	
Rural Open Space	Max. 2	0.10 – 2.0	NA	0.10	NA	
General Open Space & Facilities	NA	0.10 – 24.0	NA	0.10 – 1.0	NA	

*Density range is the lowest and highest for the mix of existing land use designations that will comprise the new place type.

**Floor Area Ratios only apply to the non-residential portion of a project.

3.3.4.3 Focus Areas

The existing general plan accomodates growth throughout the City with moderate development anticiapted at major intersections. Existing density ranges allow for incremental growth and follow development patterns from the City's rural past. The proposed project would direct most of the future development to focus areas along major transportation corridors rather than to existing neighborhoods. While the proposed project still allows the incremental growth provided in the current General Plan, the transformative growth will occur in the focus areas.

Focus areas are specific parts of the city where the vision and strategy framework indicate a desire to concentrate change in the form of future development. The General Plan Update includes a higher level of detail, illustration, and strategic recommendations for the Focus Areas to help "jump-start" implementation. Each Focus Area reflects the context, goals and policies of their respective Community Planning Areas and the mix of General Plan Designations within it.

The eight Focus Areas shown in Figure 3-3 overall, and specifically in Figures 3-4 through 3-11 are:

- **Focus Area 1:** Downtown Rancho Cucamonga (Victoria Gardens & Epicenter)
- Focus Area 2: Civic Center
- Focus Area 3: Cucamonga Station Area
- Focus Area 4: Red Hill Gateway
- Focus Area 5: Cucamonga Town Center
- Focus Area 6: Alta Loma Town Center
- Focus Area 7: Etiwanda Heights Town Center
- Focus Area 8: Southeast Industrial Area

Focus Area 1: Downtown Rancho Cucamonga

Focus Area 1 shown in Figure 3-4, illustrates the potential of the area around Victoria Gardens and the Epicenter to become the "real downtown" of Rancho Cucamonga. It is intended to show how walkable block patterns can be inserted within the large parking surfaces of Victoria Gardens and other commercial centers and underutilized parcels, and how these new blocks can support higher intensity development to generate significant new value for property owners and the community.

This Focus Area also illustrates how Foothill Boulevard can become a connector—rather than the divider—between the north and south sides of the corridor generating a very walkable, bikeable, and transit accessible City Center environment while continuing to accommodate vehicular traffic. Existing and new housing in this area will thus be very well connected to new employment along and south of Foothill Boulevard with a wide choice of travel modes.

Focus Area 2: Civic Center

Focus Area 2 shown in Figure 3-5, illustrates the potential of the area around the intersection of Foothill Boulevard and Haven Avenue to become the active, mixed-use civic heart of Rancho Cucamonga. Foothill Boulevard and Haven Avenue will become primary boulevards, transformed from separators to connectors between the neighborhoods, centers and districts on either side of these corridors. This Focus Area also shows how walkable block patterns and pedestrian networks can be extended into large undeveloped parcels, and throughout the parking lots of the City/County Civic Center and adjoining commercial centers to generate a high quality walkable public realm framework that can support more intense, active, mixed-use, transit-oriented infill development at the center of the city. It can also add significant new value to existing lower intensity development by providing more access for more people by more modes.

Focus Area 3: Cucamonga Station Area

This Focus Area shown in Figure 3-6, illustrates the potential of the Cucamonga Station area to become an intense, mixed-use transit hub of regional significance. With the expected addition of high-speed rail (HSR) and an underground transit link to Ontario International Airport, the environment around the Cucamonga Station is expected to scale upwards significantly with a

dynamic mix of housing, employment and supporting commercial development. Accordingly, the City has been working collaboratively with property owners, developers, and transit agencies to ensure unified, mixed-use, transit-oriented City Center and Urban Neighborhood environments, as envisioned by the community through the PlanRC process. As part of the City's ongoing economic development strategy for more and better employment opportunities, the surrounding areas are prioritized as a more intense, diverse, and accessible regional and local employment districts, well-connected by all modes to the growing regional transit hub.

Focus Area 4: Red Hill Gateway

Located at the foot of Red Hill on the Foothill corridor, this Focus Area shown in Figure 3-7, illustrates the potential to develop a unique mixed-use town center and significant "western gateway" to the City at the earliest of the several "original townsites" of Rancho Cucamonga. Built amidst several landmarks of Rancho Cucamonga hearkening back to the original ranchos and historic Route 66, this center will bring many daily and weekly needs and wants within easy reach of residents of Red Hill and Cucamonga, including a wide range of commercial services, civic amenities, and community gathering spaces. New housing opportunities will be available within a comfortable walk or bike ride of this new center. It will also provide a very high-quality location for a new transit stop on Foothill, and a new trailhead on the Cucamonga Creek Trail and Pacific Electric Trail.

Focus Area 5: Cucamonga Town Center

The intention of this Focus Area shown in Figure 3-8 is to provide clear recommendations for how existing properties and projects along Archibald Avenue in Cucamonga may become better connected to one another, establishing a new town center for the residents of Southwest Rancho Cucamonga that can be accessed by foot or bike via an expanded network of neighborhood streets and trails—in addition to driving. It also provides clear illustrations of ways, both small and large, in which the existing shopping centers and business parks may be improved and connected to evolve them toward more human-scale, comfortable and walkable community gathering places. Targeted improvements to pedestrian and bicycle mobility, building frontage, and public landscape can incrementally transform this area into a much safer, more attractive activity center for Cucamonga.

Focus Area 6: Alta Loma Town Center

Focus Area 6 shown in Figure 3-9, illustrates the potential for Rancho Cucamonga's first and only "small town main street" to anchor a unique mixed-use town center at the junction of the Alta Loma and Cucamonga Planning Communities taking advantage of existing connections, especially via the Pacific Electric Trail.

The Alta Loma Town Center will be a highly active and attractive community activity center reflective of traditional development patterns. Existing shopping centers and streets are improved to create more human-scale, comfortable and walkable community gathering places. Strategic infill of new commercial and residential development responds to shifting market conditions. Connectivity and walkability improvements are provided so that residents

from surrounding neighborhoods may walk, bike or ride a horse to existing and future commercial amenities.

Focus Area 7: Etiwanda Heights Town Center

This Focus Area shown in Figure 3-10, illustrates a new amenity-rich village-scale commercial center at the heart of Etiwanda Heights creating a two-block "main street" environment. At the crossroads of Wilson and Rochester Avenues, small shops, restaurants and service businesses surround Wilson Square, a 2-acre park designed as a day-to-day family play and rest area and flexible venue for community events. Across the street at the north corner of the square is a potential future multipurpose civic building (community center) that is programmed with a wide range of functions for the community.

Focus Area 8: Southeast Industrial Area

This Focus Area shown in Figure 3-11, illustrates the potential of the Southeast Area to become a modernized industrial employment district with convenient access to a wide range of services and amenities. The current subdivision patterns and infrastructure in this area still reflect its agrarian past, with many of the current industrial uses simply built within vineyards one at a time. A more complete network of complete streets—accommodating light and heavy vehicles and active mobility modes—is critical to supporting many more and better jobs and increasing economic activity per acre of land.

3.3.4.4 Land Development Assumptions

Table 3-3 Shows the anticipated development within each of the focus areas and the remainder of the City as envisioned by the General Plan Update.

		Residential Non-Reside			esidentia	ntial Jobs	
				Retail/		Industrial/	
Focus Areas	Scenario	Population	Units	Commercial	Office	Flex	
	Existing	11,224	3,798	774	511	96	
Alta Loma TC	No Project	10,409	3,876	896	325	165	
	Plus Project	11,334	4,017	843	703	91	
	Existing	25,258	9,871	2,678	3,274	4,168	
Civic Center / Haven	No Project	9,469	3,866	2,850	3,497	3,683	
	Plus Project	33,544	13,583	3,854	4,323	4,245	
	Existing	6,989	2,466	1,297	2,069	2,217	
Cucamonga TC	No Project	9,971	3,949	3,179	3,418	2,197	
	Plus Project	7,930	2,881	1,513	2,407	2,368	
	Existing	1,287	521	1,603	3,204	4,318	
Cucamonga Station	No Project	15,447	6,653	1,077	1,625	1,637	
	Plus Project	10,015	4,180	2,828	4,600	4,342	
	Existing	6,593	2,359	447	238	172	
Red Hill Gateway	No Project	8,563	3,399	1,762	770	747	
	Plus Project	8,013	2,971	915	775	165	
	Existing	3,748	1,432	8,855	344	531	
Victoria Gardens / Epicenter	No Project	4,070	1,606	6,453	1,002	978	
	Plus Project	22,495	9,290	9,742	1,039	486	
	Existing	121,230	40,348	9,306	7694	10335	
Remainder of City	No Project	138,630	50,006	11,973	10,230	10375	
	Plus Project	140,564	49,558	12,067	13,220	15262	
	Existing	176,329	60,795	24,960	17,334	21,837	
Totals	No Project	196,559	73,355	28,190	20,867	19,782	
	Plus Project	233,895	86,480	31,762	27,067	26,959	
	Existing		175,522				
Net Change from Existing	No Project	20,230	12,560	3,230	3,533	-2,055	
	Plus Project	57,566	25,685	6,802	9,733	5,122	
Totals	No Project	195,752	54,967	23,887	45,938	20,262	
	Plus Project	233,088	68,092	27,459	52,138	27,439	

Table 3-3Land Use Development Projections By Focus Area and Remainder of City
for Buildout

¹ Other land uses such as agriculture, art, entertainment, recreation, and public/institution represent a net zero change in projected jobs and are not included in the table.

3.3.4.5 Land Use Designations & Acreages

Table 3-4, *Land Use Designations and Place Types*, and Figure 3-2, *Land Use Plan*, show the land use designations regulating development in the City and SOI. Figure 3-3, *Focus Area Map*, shows the Focus Areas in the City.

Existing GP Designation	Acres	New GP Place Types	Acres
Very Low Density Residential	2,629	Semi-Rural Neighborhood	2,632
Open Space	1		
Low Density Residential	2		
Very Low Density Residential	180	Traditional Neighborhood	1,904
Low Density Residential	760		
Low/Medium Density Residential	79		
Medium Density Residential	20		
General Commercial	62		
Office	1		
General Industrial	4		
Not Designated	795		
Civic/Regional	3		
Very Low Density Residential	954	Suburban Neighborhood Very	4,101
Low Density Residential	3,048	Low	
Medium Density Residential	4		
Low/Medium Density Residential	92		
Civic/Regional	1		
Schools	1		
Neighborhood Commercial	1		
Low Density Residential	351	Suburban Neighborhood Low	2,506
Low/Medium Density Residential	1,468		
Medium Density Residential	627		
Medium/High Density Residential	14		
Mixed Use	36		
Public	5		
Flood Control/Utility Corridor	5		
Medium High Density Residential	237	Suburban Neighborhood	392
High Density Residential	26	Moderate	
Mixed Use	114		
General Commercial	5		
Office	10		
Mixed Use	97	Urban Neighborhood	165
Core Living	5	-	
Village Neighborhood	60		
Recreation	3		
Low density Residential	57	Neighborhood Corridor	245
Medium Density Residential	63	-	
Medium/High Density Residential	45		

Table 3-4 Land Use Designations and Place Types

Existing GP Designation	Acres	New GP Place Types	Acres
High Density Residential	12		
Office	21		
Neighborhood Commercial	28		
General Commercial	10		
General Industrial	8		
Civic/Regional	1		
Medium Density Residential	20	City Corridor Moderate	319
Medium/High Density Residential	32		
Mixed Use	109		
Office	2		
Industrial Park	63		
General Commercial	93		
Medium Density Residential	10	City Corridor High	603
Medium/High Density Residential	8		
Mixed Use	147		
Neighborhood Commercial	3		
Office	18		
Parks	4		
Industrial Park	117		
Community Commercial	118		
General Commercial	165		
General Industrial	13		
Very Low Density Residential	3	Neighborhood Center	284
Low Density Residential	14		
Low/Medium Density Residential	36		
Medium/High Density Residential	7		
Medium Density Residential	11		
Mixed Use	38		
Neighborhood Commercial	121		
Office	21		
General Commercial	11		
Industrial Park	11		
General Industrial	6		
Flood Control/Utility Corridor	3		
Open Space	2		
Low Density Residential	5	Traditional Town Center	279
Low/Medium Density Residential	22		
Medium/High Density Residential	6		
Medium Density Residential	1		
High Density Residential	7		
Mixed Use	73		
Neighborhood Commercial	11		
Office	15		
General Commercial	16		
General Industrial	122		
Civic/Regional	1		

Existing GP Designation	Acres	New GP Place Types	Acres
Mixed Use	214	City Center	457
General Commercial	54		
Industrial Park	74		
Not Designated	86		
Civic/Regional	29		
Industrial Park	117	Office Employment District	122
Civic/Regional	5		
Mixed Use	111	21st Century Employment	466
Industrial Park	233	District	100
General Industrial	122		
Industrial Park	100	Neo-Industrial Employment	1,865
General Industrial	1,245	District	1,005
Heavy Industrial	407		
Flood Control/Utility Corridor	25		
Civic/Regional	88		
-			000
Industrial Park	41	Industrial Employment District	980
General Industrial	451		
Heavy Industrial	488		
Very Low Density Residential	4	Natural Open Space	1,467
Low Density Residential	3		
Hillside Residential	41		
Flood Control/Utility Corridor	206		
Conservation	1,074		
Open Space	120		
Not Designated	19		
Very Low Density Residential	61	Rural Open Space	3,782
Hillside Residential	642		
Flood Control/Utility Corridor	367		
Conservation	196		
Open Space	2,505		
Not Designated	11		
Very Low Density Residential	145	General Open Space & Facilities	4,149
Low Density Residential	84		,
Low/Medium Density Residential	77		
Medium Density Residential	24		
High Density Residential	1		
Medium/High Density Residential	15		
Office	1		
Neighborhood Commercial	1		
General Commercial	3		
Mixed Use	7		
Industrial Park	1		
General Industrial	7		
Hillside Residential	32		
Conservation	1		

Existing GP Designation	Acres	New GP Place Types	Acres
Community College	186		
Open Space	300		
Flood Control/Utility Corridor	2,127		
Civic/Regional	124		
Schools (ES)	245		
Schools (HS)	177		
Schools (JHS)	137		
Parks	431		
Recreation	2		
Not Designated	21		
		No Designation	281
Total Parcels	26,999	Total Parcels	26,999
	4,563	Rights of Way (approx)	4,563
Grand Total	31,562	Grand Total	31,562

Applying the proposed general plan designations to the entire city regardless of development state, results in a maximum theoretical capacity as shown in Table 3-5. This capacity is theoretical, as much of the City is already developed and substantial increases in density and intensity are not anticipated outside of the focus areas described in Chapter 2 of Volume 2 of the General Plan. As shown in the table, the calculated population with the maximum capacity is 432,527 which is roughly twice the projected 233,088 estimated buildout for the planning period. The annual growth rate needed to reach the maximum capacity within the planning period would need to be 2.35 percent per year over the 20-year planning period. For non-residential development the maximum capacity of 233,859,330 square feet is well above the anticipated 12,080,000 estimated for the planning period.

	Acres	Max DU Total	Potential Pop Total	Max SF Total
Natural Open Space	1,472	-	-	-
Rural Open Space Preserve	767	-	-	-
Rural Open Space	3,029	6,058	3,830	-
General Open Space	3,966	-	-	-
Semi-Rural Neighborhood	2,614	5,227	16,517	-
Traditional Neighborhood Low	587	2,348	7,420	-
Traditional Neighborhood Moderate	1,300	10,402	26,298	22,656,057
Traditional Neighborhood High	17	245	605	-
Suburban Neighborhood Very Low	4,096	16,385	51,777	-
Suburban Neighborhood Low	2,512	35,161	86,848	-
Suburban Neighborhood Moderate	386	11,580	28,603	-
Urban Neighborhood	165	8,259	16,319	2,878,083

Table 3-5Total Capacity of General Plan

	Acres	Max DU Total	Potential Pop Total	Max SF Total
Neighborhood Corridor	174	5,219	9,023	3,031,037
Neighborhood Corridor Low	93	1,298	2,245	1,615,282
City Corridor Moderate	287	11,491	19,869	7,508,336
City Corridor High	640	38,386	66,369	41,802,447
Neighborhood Center	282	6,766	3,342	4,912,003
Traditional Town Center	269	8,071	9,969	7,031,852
City Center	457	45,663	56,395	39,781,758
21st Century Employment District	467	19,598	14,521	20,326,432
Office Employment District	122	3,649	1,803	5,298,069
Neo-Industrial Employment District	1,818	43,623	10,774	47,504,992
Industrial Employment District	1,129	-	-	29,512,982
	26,649	279,429	432,527	233,859,330

Open Space

Open space is the place people go to recharge, play, exercise and learn. Open spaces can be large recreational parks, natural conservation areas, and schools, or trails, or a green space between buildings. Community playfields, Central Park and the conserved natural and rural open spaces of the foothills are large specialized open space areas, whereas small- and medium-size parks, which provide places for informal play, family activities, and quiet recreation, are considered part of the neighborhood they serve. A wide range of open space types together meet the full range of residents' needs for active and healthy lifestyles. Open spaces are especially important as housing density increases and individual yards diminish, so having places nearby to play, to relax, or just to be out of the house is an essential amenity. Existing community open space amenities include the natural and rural foothill open spaces, neighborhood and regional parks, and an extensive network of trails that connect these open spaces to one another and to the nearby neighborhoods. The focus of the Open Space Element is to continue to grow and enhance the network of open spaces and trails linking them to enhance environmental quality, quality of life, community health, and sustainable long-term value.

Mobility and Access

The opportunity to move around the city in an efficient manner using a variety of methods. Everything from walking to skateboarding, transit to trucks is included in this Chapter. The ability to move around enables us to get to jobs, goods, services, and education and enjoy entertainment, family, and friends. While the car has been the dominant mode of transportation for years, as the city grows there is an opportunity to develop more mobility choices that focus on connecting people to places in the city. These new opportunities will promote health, sustainability, and economic benefits for the residents and change how the city is developed. While autonomous vehicles, car share, electric scooters and the like are evolving technologies, they are not yet a large part of the mobility picture for the city.

Planners have all sorts of terms to talk about mobility, but it all comes down to giving people choices in how they move about their city. The automobile is the dominant choice for most people because it is convenient but it also the most expensive for the person and the City. Because of the emphasis on the automobile there is an urban landscape where cars can move about more easily than people, and the lack of access is a barrier to much the City has to offer. The lack of connectivity between neighborhoods discourages walking and biking for mobility rather than only recreation. For some, the lack of access also means a simple trip to the store is more difficult than it should be. For example, some areas of the City lack complete sidewalks which makes walking difficult. This chapter does not advocate the abandonment of the automobile, but rather requires that roads be designed to include people who are not in automobiles. It should be possible to walk or bike to any part of this world class city safely, therefore this chapter includes policies to extend improvements into older areas of the City where people lack these choices.

Housing

The Housing Chapter (Volume 2, Chapter 5) focuses on understanding the housing needs in Rancho Cucamonga and sets forth its best plan of actions to meeting those needs through residential land use planning and programmatic efforts. A key component of housing planning for Rancho Cucamonga is the amount and location of new housing in the community. For Housing Element purposes, the planning for housing growth is mandated by State law through the Regional Housing Needs Assessment (RHNA) process. California General Plan law requires each city and county to have land zoned to accommodate its fair share of the regional housing need. For this Housing Element (2021-2029), the City of Rancho Cucamonga has been allocated a RHNA of 10,525 units, divided into the following income categories in relation to Area Median Income (AMI):

- Very Low Income (up to 50 percent AMI) 3,245 units
- Low Income (51-80 percent AMI) 1,920 units
- Moderate Income (81-120 percent AMI) 2,038 units
- Above Moderate Income (>120 percent AMI) 3,322 units

While the Housing Chapter identifies the level of income anticipated for the housing units, it is the land use chapter and the associated land use map (See Figure 3-2) that illustrates where the housing is anticipated. The state considers high density housing to be more affordable than lower density housing.

Public Facilities and Services

Public facilities in the City of Rancho Cucamonga include the Civic Center, community sports, family resources, cultural and senior centers, and libraries. Every built facility has a useful service life; therefore, the City plans for both expansion and maintenance and expanding services requires an ongoing investment in terms of training and support. While new facilities are often funded by new development, maintenance responsibility for existing facilities generally falls to the City's existing residents. Many of the essential utilities in the city are not under City jurisdiction; however, the City works closely with the service providers to ensure a

collaborative approach to meeting the needs of residents. Regional reports and studies for services will need to be revised following adoption of the General Plan Update to reflect the service demand in the focus areas.

3.3.5 VOLUME 3 ENVIRONMENTAL PERFORMANCE

This volume addresses the natural environment that both affects, and is affected by, development within the City and is divided into the following chapters:

3.3.5.1 Resource Conservation

The Resource Conservation Chapter ensures that development is done with care for the local and global resources that make the City special. In addition to natural resources, such as air and water, the Resources Conservation chapter also includes policies that respects the City's history, including historic and cultural, and tribal cultural resources.

3.3.5.2 Safety

The Safety chapter identifies hazards, such as flooding, wildfire, and ground disturbance, that would affect the city and supports plans to deal with those hazards. While it is not possible to prevent these hazards, the City has plans and will allocate the resources to deal with the hazard. Key concerns include the following:

- Areas along the northern portion of the city are located within Special Study Zones due to active or potentially active earthquake faults.
- Developed and undeveloped properties within the northern portion of the city are vulnerable to wildfire risks due to their proximity to forested lands and land adapted to periodic wildfire events.
- Areas of the city north of State Route 210 should be evaluated for evacuation purposes to ensure that the circulation network is adequately designed and maintained for daily and emergency purposes.
- Investments in community amenities and infrastructure should anticipate changes in future conditions resulting from extreme weather events and climatic conditions that diminish these assets' effectiveness.
- Future developments and community investments should prioritize locations in reduced hazard areas, which will ensure safer future operations and risk reduction.

3.3.5.3 Noise

This Chapter was prepared pursuant to the requirements of Government Code Section 65302(f)) and addresses noise and vibration. This Chapter identifies noise in the community from a variety of sources and supports a pattern of land uses designed to minimize exposure of residents to excessive noise and includes possible solutions to address existing and foreseeable noise problems. This Chapter also establishes areas where more noise may be acceptable.

3.3.6 VOLUME 4 IMPLEMENTATION

This volume contains the methods by which the City will implement the policies of the General Plan. In some instances, the implementation continues activities already underway by the City, and in others there will be subsequent projects. The volume also contains the land use tool kit

that is intended to provide property owners and planners with guidance on how to realize the design goals set forth in the General Plan.

3.3.7 ASSOCIATED ACTIONS

The following actions will occur concurrent with, or following adoption of the General Plan Update.

3.3.7.1 Development Code Update

The amendments to the Development Code will implement the new General Plan, which will include the addition of form- based code components. The goals of the Development Code update are to codify the community's vision as established in the General Plan update process, increase certainty in the development review process, and facilitate implementation of key General Plan concepts related to land use and urban design. A primary objective of the code update is to integrate form-based regulations in appropriate areas, such as along Foothill Boulevard, to promote pedestrian activity and transition these areas from auto-oriented to more walkable and urban configurations. Because the future code relies on the outcome of the General Plan Update, the specifics of the code amendments can not be known at this time. However, the following are the fundamental elements of the Development Code Update:

- An updated hybrid Development Code that integrates form-based and conventional zones.
- New zoning regulations for walkable mixed-use areas. It is anticipated that a form-based code will be completed for at least the Foothill Boulevard corridor and possibly some of the City's other key corridors.
- Evaluation of existing Specific Plans and Master Plans and the opportunities for incorporating existing standards into the new zoning regulations.
- New Objective Design and Development Standards (ODDS) for multi-family residential and mixed-use development projects with an evaluation of how the proposed ODDS align with the form-based standards, such as building and frontage types.
- Development of an interim process to establish the new form-based code standards prior to the adoption of the updated Development Code.
- New or revised conventional zones to implement the land use vision of the General Plan.
- Revised general development standards to address General Plan policy or existing deficiencies with respect to landscaping, open space, and noise, among others as needed.
- Improved administration and permit procedures to streamline development review for projects consistent with the General Plan and ensure adequate tools for enforcement of the Code.
- Compliance with State and Federal law (does not include a sign code update).

As part of the development code update, several of the existing specific plans in the City will no longer be necessary. In many instances the original specific plans are fully built out, and in others revisions to the code will supercede the need for the specialized zoning that a specific plan allows. The following changes are anticiapted at the time the development code is updated:

- Empire Lakes Specific Plan (ELSP) (Also referred to as IASP Sub-Area 18 Specific Plan) 1994 adopted/2016 last revised – Amend to add provisions for the Cucamonga Station Area Plan
- Etiwanda Highlands Planned Unit Development (EH) 1988 Repeal
- Etiwanda North Specific Plan (NESP) 1992- Repeal
- Etiwanda Specific Plan (ESP) 1985 adopted/2000 last revised Repeal
- Terra Vista Community Plan (TCVP) 1983 adopted/1995 last revised Repeal
- Town Square Master Plan (TS) 2002 Repeal
- Victoria Arbors Master Plan (VA) 2002 Repeal
- Victoria Community Plan (VCP) 1981 Repeal

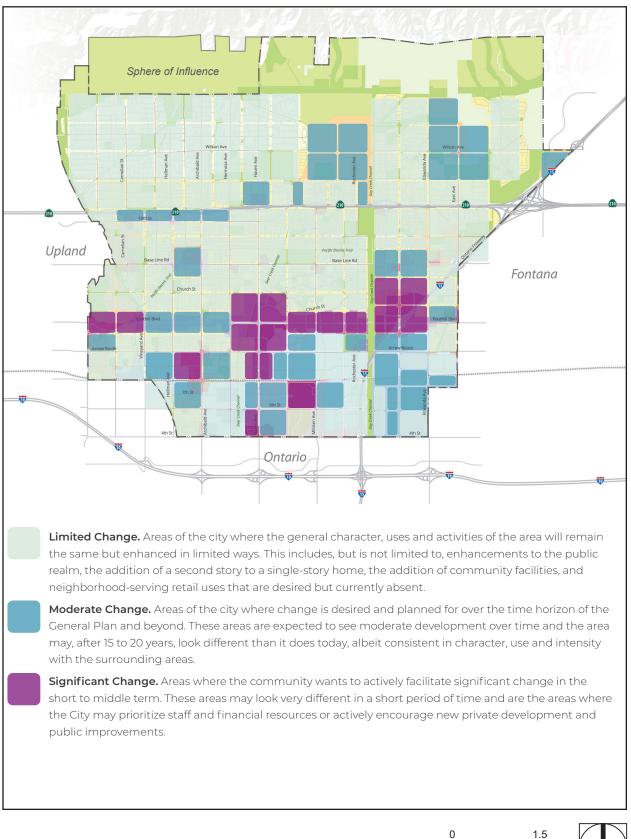
3.3.7.2 The Rancho Cucamonga Climate Action Plan (CAP)

The proposed project includes a Climate Action Plan (CAP) proposes goals, strategies, and measures to reduce communitywide and municipal GHG emission reductions in the categories of zero emission and clean fuels, efficient and carbon free buildings, renewable energy and zero carbon electricity, carbon sequestration, local food supply, efficient water use, waste reductions, and sustainable transportation. Each measure is described in detail in the CAP, including the full description, key performance metrics, and their estimated GHG emissions reduction potential.

- Goal 1: Zero Emissions and Clean Fuels. A community that uses zero emission vehicles and clean vehicles to move people and goods.
- **Goal 2: Efficient and Carbon Free Buildings**. An existing building stock that is energy efficient and net zero carbon.
- **Goal 3: Green Building.** Development practices that demonstrate high environmental performance through decarbonization, sustainable design, and zero net carbon buildings.
- Goal 4: Sustainable City-Facilities. City-facilities that achieve high levels of sustainable design.
- **Goal 5: Zero Emission Electricity.** A city powered by carbon free electricity.
- **Goal 6: Thriving Urban Forests.** A community with significant urban forestry resources.
- **Goal 7: Local Food.** A community with locally grown and affordable food.
- **Goal 8: Water Conservation.** A community that conserves and recycles water.
- **Goal 9: Efficient Wastewater Management.** A city that generates minimal wastewater through sustainable treatment and reuse.
- **Goal 10: Zero-Waste.** A community that produces minimal solid waste.

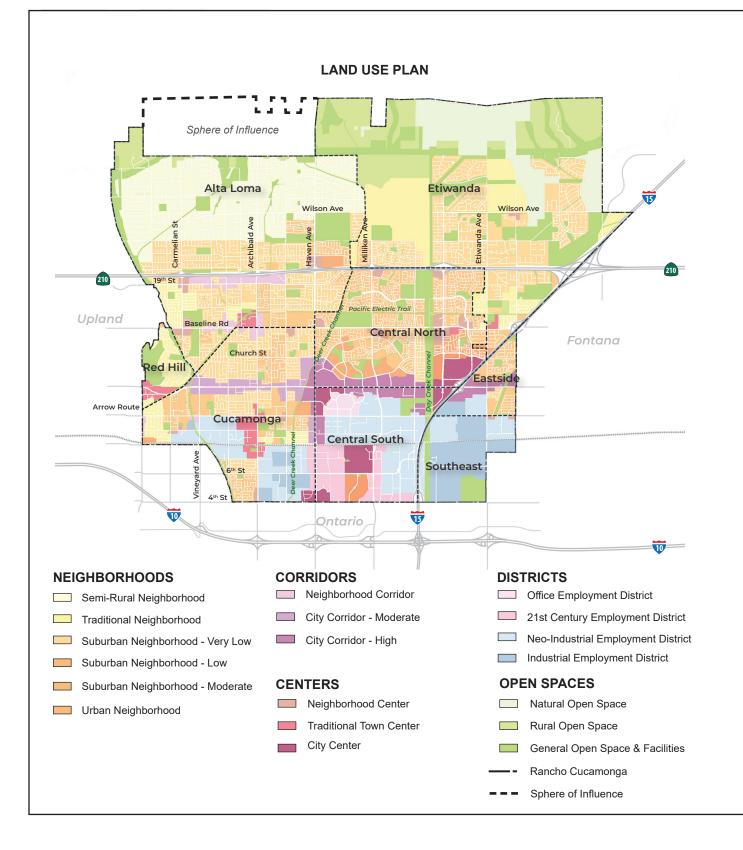
- **Goal 11: Regional Mobility Hub.** A multimodal transportation hub that connects regional and local destinations through a symbiotic relationship with regional partners.
- **Goal 12: Active Transportation.** A first-class pedestrian and bicycle network that fosters safe and connected access to non-motorized travel and recreation.
- **Goal 13: Sustainable Transportation.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.

Figure 3-1 - Degrees of Change Map 3. Project Description



Scale (Miles)

GENERAL PLAN DESIGNATIONS



	General Plan Designation	Residential Density (DU/AC)*	Non-Residential Intensity (FAR)	Target Use Mix Ratio (Res/Non-Res)
NE	IGHBORHOODS			
	Semi-Rural Neighborhood	Max. 2	NA	100/0
	Traditional Neighborhood	Max. 8	Max. 0.4	80/20
	Suburban Neighborhood - Very Low	Max. 6	NA	100/0
	Suburban Neighborhood - Low	Max. 14	NA	100/0
	Suburban Neighborhood - Moderate	Max. 30	NA	100/0
	Urban Neighborhood	20 - 50	0.2 - 0.4	80/20
со	RRIDORS			
	Neighborhood Corridor	Max. 24	0.4 - 0.6	70/30
	City Corridor - Moderate	24 - 42	0.4 - 1.0	70/30
	City Corridor - High	36 - 60	0.6 - 1.5	70/30
CE	NTERS			
	Neighborhood Center	Max. 24	0.2 - 0.4	20/80
	Traditional Town Center	Max. 30	0.2 - 0.6	50/50
	City Center	40 - 100	1.0 - 2.0	50/50
DIS	STRICTS			
	Office Employment District	18 - 30	0.6 - 1.0	20/80
	21st Century Employment District	24 - 42	0.4 - 1.0	30/70
	Neo-Industrial Employment District	14 - 24	0.4 - 0.6	10/90
	Industrial Employment District	NA	0.4 - 0.6	0/100
OP	EN SPACES			
	Natural Open Space	NA	NA	NA
	Rural Open Space	Max. 2	NA	NA
	General Open Space & Facilities	NA	NA	NA

Note: See the following page on "Calibrating Development" for further details on density, FAR, and use mix ratio. The standard for population density for all areas covered by the General Plan will be dictated by the occupancy limits in the City's building codes.

Figure 3-2 - Land Use Plan - City of Rancho Cucamonga 3. Project Description

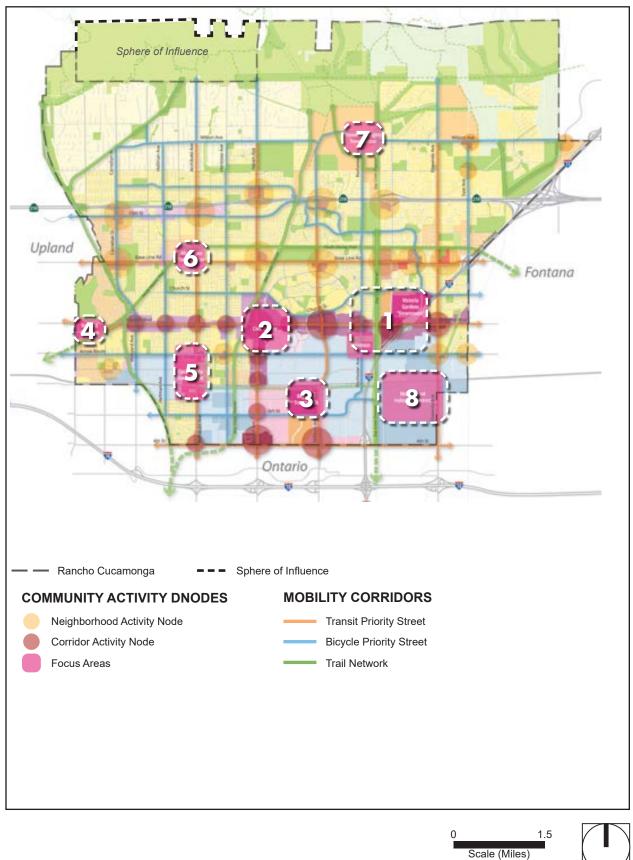
1.5 0 Scale (Miles)



PlaceWorks



Figure 3-3 - Focus Area Map 3. Project Description



Source: City of Rancho Cucamonga

PlaceWorks





- Improve Foothill Boulevard from a highway to a city center boulevard, integrating and prioritizing human activity, active transportation and transit.
- Improve Church Street, Arrow Route and Rochester Avenue with buffered bike lanes.
- Consider lane reductions on Rochester from 5 to 3 lanes to accommodate bikes. Rochester Avenue is an important connection from the Rancho Cucamonga Station to the foothills.
- Create a large usable open space activities and services such as community gardens.
- 5 Create new crossing and signal for Day Creek Channel trail and Park Drive.

- Create connections via trails along Day Creek Channel to Etiwanda Heights and along 8th Street to Cucamonga Town Center south of the Rancho Cucamonga Station tracks under the future High Speed Rail.
- Extend trail and pedestrian connections under I-15 south to the industrial districts.
- 8 Integrate mixed-use infill development within "parking blocks" of Victoria Gardens extending over time south of Foothill as well.
- Oreate Epicenter branding at entrances along Rochester and activate the street and park with infill buildings and streetscape improvements, including banners, signage and landscaping.



Figure 3-5 - Focus Area 2: Civic Center 3. Project Description

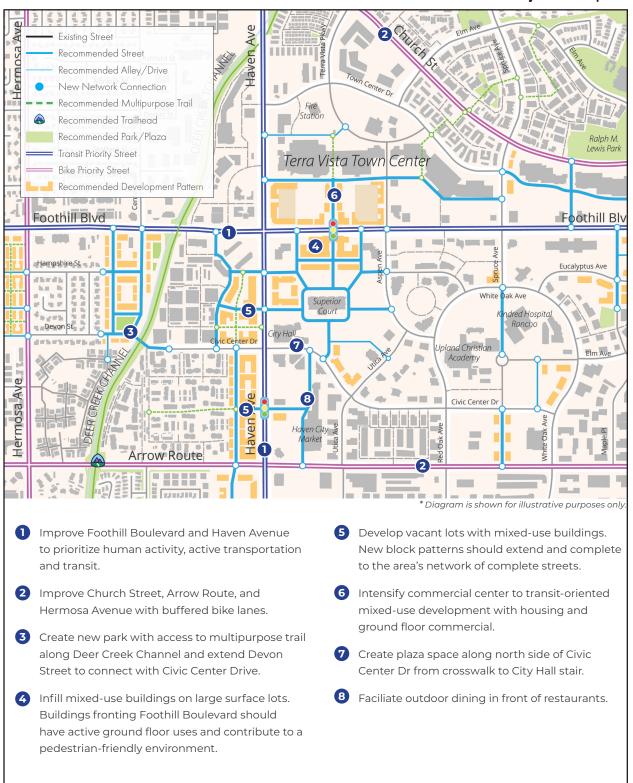
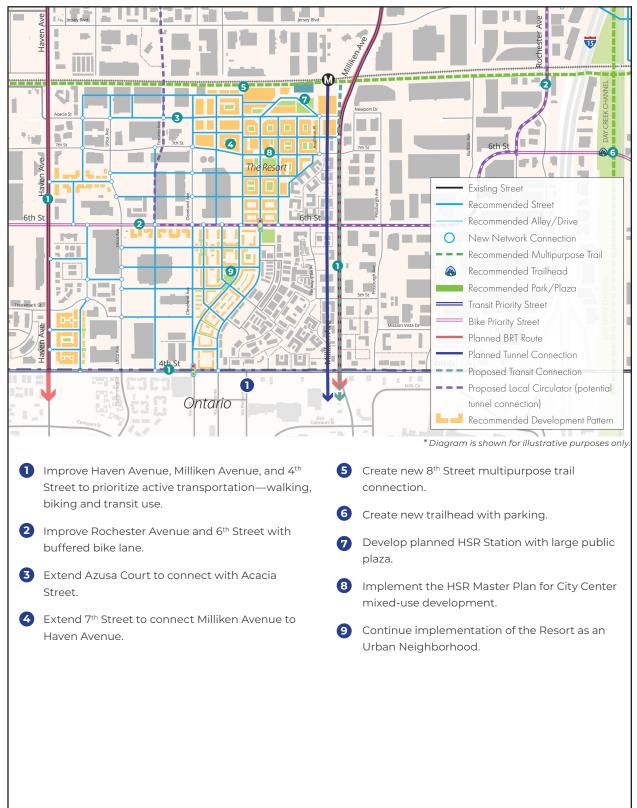
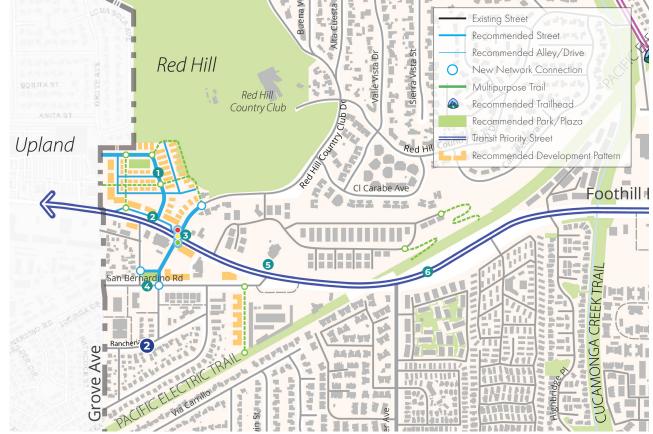




Figure 3-6 - Focus Area 3: Cucamonga Station Area 3. Project Description





- Develop a new, mixed-use neighborhood with retail fronting a new side access (frontage) lane along Foothill Boulevard, and neighborhoodscale housing arranged around a central neighborhood green.
- 2 Provide a new side access (frontage) lane along Foothill Boulevard for improved street frontage and access to new commercial development.
- **3** Realign Red Hill Country Club Drive at new, signalized intersection to provide a new street connection and address for future infill development south of Foothill Boulevard.

* Diagram is shown for illustrative purposes only

- **4** Create a new neighborhood green at San Bernardino Road and Red Hill Country Club Drive.
- **5** Preserve Sycamore Inn and explore opportunities to improve access and create a stronger presence on Foothill Boulevard with an entry plaza or green.
- 6 Improve Foothill Boulevard to prioritize transit and active transportation.



Vision for Foothill Boulevard entering into Rancho Cucamonga from the west. Streetscape improvements include widened sidewalks and a class IV cycle track on the south side of the street(right). A side access lane with curbside parking and wide sidewalks provide access to new mixed-use infill buildings to the north (left).



Access to the Pacific Electric Trail is provided via several new trailhead/trail connections in Red Hill.



Streetscape and landscape reflect the historic character of Red Hill.



Source: Sargent Town Planning, 2021

CITY OF RANCHO CUCAMONGA GENERAL PLAN UPDATE DRAFT EIR CITY OF RANCHO CUCAMONGA

Figure 3-7 - Focus Area 4: Red HIII Gateway 3. Project Description

New neighborhood-serving parks and plazas, as well as some streets, can be programmable spaces for a variety of activities.

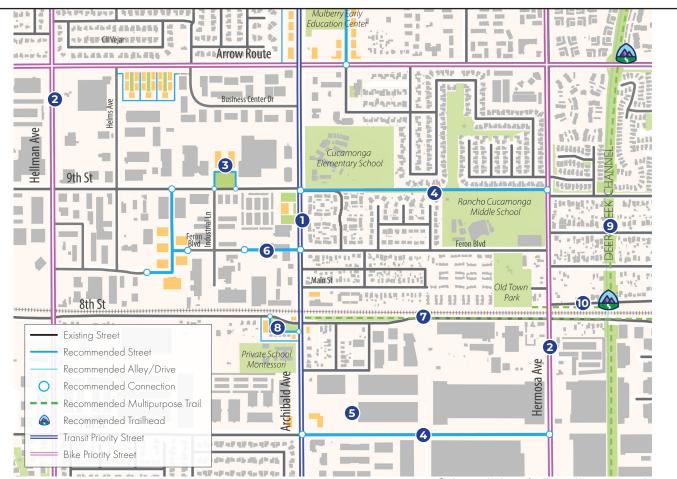


Design character of new Red Hill neighborhoods south of the Red Hill



PlaceWorks





An outdoor dining court activates a flexindustrial district.



Auto repair shops converted into new uses in a new neighborhood center environment.



Loading bay of a former industrial building-turned-brewery, with additional outdoor dining in a converted portion of the parking lot



"Tactical Urbanism" - simple retrofits to existing conditions in front of businesses - including "parklets" (lower-left; outdoor dining areas in parking areas in front of businesses) or converting industrial loading bays into dining terraces (lower-right) to create new places for activity.

- Improve Archibald Avenue to prioritize active transportation and transit, including streetscape improvements, such as lighting, landscaping, and signage, and striping Class II buffered bike lanes in both directions.
- 2 Improve Arrow Route, Hellman Avenue, and Hermosa Avenue with buffered bike lanes.
- **3** Create Cucamonga Town Square on 9th Street as focal point for the Town Center. This could begin by simply adding furnishings and shade structures within a portion of existing parking lots.
- 4 Extend 7th and 9th Street, as a trail or street, to connect Archibald Avenue and Hermosa Avenue.
- 5 Explore opportunities for infill and redevelopment.

* Diagram is shown for illustrative purposes only.

- 6 Extend Feron Boulevard, as drive or paseo, to connect to Archibald Avenue.
- 7 Create a new multipurpose trail along 8th Street right-of-way south of the Metrolink/BNSF railroad connecting Cucamonga Town Center to Rancho Cucamonga Station.
- 8 Create new park—Old Town Park—for 8th Street multipurpose trail.
- 9 Create a new multipurpose trail along Deer Creek Channel through "Northtown," the original settlement of Cucamonga.
- 0 Create Humboldt trailhead and trail along the north side of the railroad to Old Town Park.

Figure 3-8 - Focus Area 5: Cucamonga Town Center 3. Project Description



Alley (in Old Town Pasadena) converted into a pedestrian paseo with attractive landscaping and seating for outdoor dining and socializing.



PlaceWorks





- provide a new community open space at Roberds Street and Base Line Road.
- 2 Improve Amethyst Avenue for the comfort and safety of pedestrians. Active uses and building frontages should contribute to creating a "main street" environment.
- **3** Improve Baseline Road and Archibald Avenue to prioritize active transportation and transit.
- 4 Improve Hellman Avenue with buffered bike lanes.

- in coordination with Cucamonga Valley Water District.
- 6 Create shared parking for the Town Center and access to Pacific Electric Trail.
- **7** Enhance building frontages of existing shopping centers to accommodate arcades with outdoor seating and dining.
- 8 Take advantage of opportunities for neighborhood-scale infill in a variety of forms.



Figure 3-9 - Focus Area 6: Alta Loma Town Center 3. Project Description

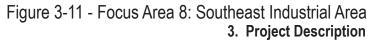


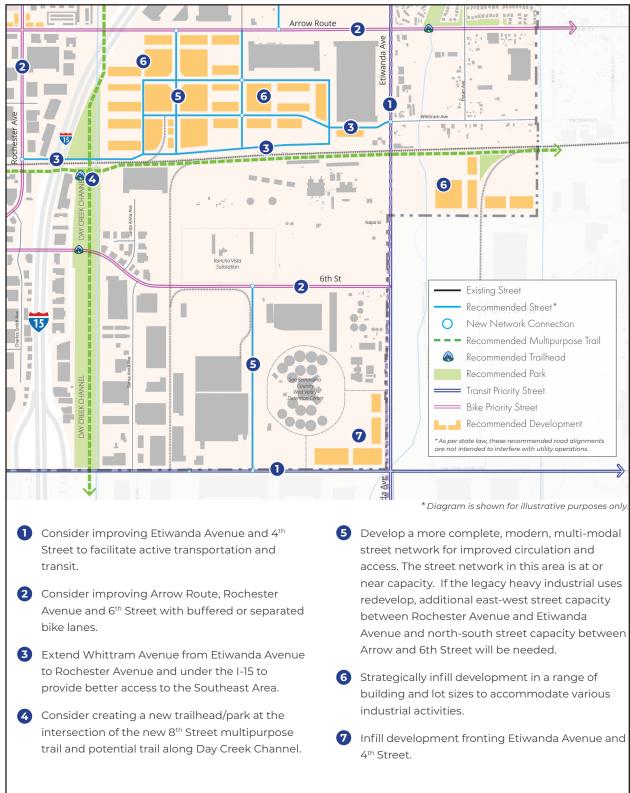
PlaceWorks



Figure 3-10 - Focus Area 7: Etiwanda Heights Town Center 3. Project Description









4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines Section 15125, a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time of the notice of preparation is published, from both a local and a regional perspective." The environmental setting will provide the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the project. Subsections of Chapter 5, *Environmental Analysis*, provide more detailed descriptions of the local environmental setting for the environmental topical areas. Individual environmental topical sections also expand on the context in which cumulative environmental impacts are analyzed.

For many of the environmental impacts, the setting is within the boundaries of the city and sphere of influence (SOI). However, for some environmental topical sections—air quality, biological resources, greenhouse gas (GHG) emissions, and transportation—the setting is the regional context or larger. Section 4.2, *Regional Environmental Setting*, expands on the regional environmental context which plays a role in determining potential cumulative impacts throughout the DEIR. Section 4.5, *Assumptions Regarding Cumulative Environmental Impacts*, describes the methods used to analyze cumulative impacts as well as the cumulative setting for each topical area.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 REGIONAL LOCATION

The City of Rancho Cucamonga is in the Inland Empire at the base of the San Gabriel Mountains in western San Bernardino County. It is bounded by the cities of Upland, Ontario, Fontana, the San Bernardino National Forest, and rural unincorporated areas of San Bernardino County. State Route 210 (SR-210), which runs east-west, bisects the city; Interstate 15 (I-15), which runs north-south, bounds the eastern side of the city, and I-10, which runs east-west, is approximately 0.75 mile south of the city.

4.2.2 REGIONAL PLANNING CONSIDERATIONS

4.2.2.1 Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 380,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring

environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in September 2020. Major themes in the 2020 RTP/SCS are:

- Integrating strategies for land use and transportation.
- Striving for sustainability.
- Protecting and preserving existing transportation infrastructure.
- Increasing capacity through improved system managements.
- Providing more transportation choices.
- Leveraging technology.
- Responding to demographic and housing market changes.
- Supporting commerce, economic growth, and opportunity.
- Promoting the links between public health, environmental protection, and economic opportunity.
- Incorporating the principles of social equity and environmental justice into the plan.

The RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The RTP/SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to government and developers for consistency.

4.2.2.2 South Coast Air Basin Air Quality Management Plan

Rancho Cucamonga lies in the northwest portion of the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (AQMD). Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law, and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants, including ozone (O₃), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide, coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O₃, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. Based on the SoCAB AQMP, the SoCAB is designated nonattainment for O₃, PM_{2.5}, PM₁₀, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO₂ under the California AAQS.

4.2.2.3 Greenhouse Gas Emissions Reduction Legislation

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in a number of State regulations. Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction goals for the State of California:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32, the Global Warming Solutions Act (2006), was passed by the State legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 established a legislative target for the year 2020 goal outlined in Executive Order S-03-05. CARB prepared its first Scoping Plan in 2008 that outlined the State's plan for achieving the 2020 targets of AB 32.

In 2008, SB 375 was adopted to connect passenger-vehicle GHG emissions reduction targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled (VMT) and vehicle trips.

In September 2016, Governor Brown signed SB 32, making the Executive Order B-15-30 goal for year 2030 of a 40 percent reduction below 1990 levels by 2030 into a statewide-mandated legislative target. CARB issued an update to its Scoping Plan in 2017, with programs for meeting the SB 32 reduction target.

Executive Order B-55-18 sets a goal for the state to achieve carbon neutrality no later than 2045 and to achieve and maintain net negative emissions thereafter. SB 100 would help the state reach the goal set by Executive Order B-55-18 by requiring that the state's electricity suppliers have a source mix that consists of at least 60 percent renewable/zero carbon sources in 2030 and 100 renewable/zero carbon sources in 2045.

4.2.2.4 Senate Bill 743

On September 27, 2013, SB 743 was signed into law and started a process that has fundamentally changed transportation impact analysis for CEQA compliance. With the adoption of SB 375, the state signaled its commitment to encourage land use and transportation planning decisions and investments that reduce VMT and contribute to the reduction of GHG emissions, as required by the California Warming Solutions Act of 2006 (AB 32).

SB 743 generally eliminates auto delay, level of service, and other similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts under CEQA. Pursuant to the CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code § 21099[b][1]).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. Under the new guidelines, VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects, were required beginning July 1, 2020. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements for evaluation of level of service, but these metrics can no longer be the basis for determining transportation impacts under CEQA.

4.2.2.5 Regional Water Quality Control Board, Santa Ana River Basin Region 8

Under the Porter-Cologne Water Quality Act, California's water quality control law, the State Water Resources Control Board has ultimate control over water quality policy and allocation of state water resources. Through its nine Regional Water Quality Control Boards, the State Water Resources Control Board carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan. The City of Rancho Cucamonga is in the Santa Ana River Basin, Region 8.

Santa Ana River Basin Plan

The Water Quality Control Plan for the Santa Ana River Basin was last updated in 2019. This Basin Plan gives direction on the beneficial uses of the state waters within Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards in the basin plan.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 LOCATION AND LAND USE

The city encompasses 20,707 acres and its SOI consists of an additional 3,735 acres, for a total of 24,442 acres across the entire plan area. Figure 1-3, *Existing Land Uses*, shows the existing land uses in the City.

- **Residential**. Residential uses are grouped into single-family units, multiple-family units, and mobile homes.
- **Commercial and Industrial**. This includes a range of nonresidential uses primarily oriented to commerce. This includes general commercial, office, and industrial (including manufacturing).
- **Mixed Use.** A mix of uses grouped within a development (residential, office, commercial, retail, etc.).
- **Open Space Resource**. Open space amenities include several categories—open space set aside for a variety of land uses, and natural open spaces that can also be used for conservation easements or habitat.
- Public Facility. These land uses are essential amenities that contribute to the quality of life in the community. Community amenities include educational facilities, religious organizations, parks and recreation, and civic facilities.

4.3.2 GENERAL PLAN AND ZONING

In Chapter 3, *Project Description*, Table 3-3, *Land Use Designations in the City*, and Figure 3-1, *Land Use Map*, show the land use designations regulating development in the city and SOI. Figure 4-1, *Existing Zoning, City of Rancho Cucamonga*, and Figure 4-2, *Existing Zoning, Sphere of Influence*, show the zoning districts in the city and SOI.

4.4 SUMMARY OF EXISTING LAND USES

Table 4-1, *Summary of Existing Land Uses*, shows the distribution of existing land uses and the number of housing units, households, population, nonresidential square footage, and jobs in Rancho Cucamonga as of 2020.

Land Use	Area (acres)	Area
Residential	11,420	55.0%
Commercial	799	3.9%
Mixed Use	950	4.6%
Industrial	3,626	17.5%
Open Space	2,517	12.1%
Public Facility	1,436	6.9%
Total	20,748	100.0%

Table 4-1 Summary of Existing Land Uses

As shown in Table 4-1, residential and industrial uses make up approximately 55 percent and 17.5 percent, respectively, of land uses in the city. Table 4-2, Land Use Designations in the City and SOI Under Current General Plan Land Use Designations, shows the permitted uses under each current land use designation.

Land Use Designations	
Current General Plan Land Use Designation	Permitted Uses (General Description)
Hillside Residential (0.1–2.0 du/ac)	No more than two units per net buildable acre (buildable acre is considered to be a contiguous area of the lot, which is less than 30 percent in natural slope).
Very Low Residential (0.1–2.0 du/ac)	Detached, very low-density single residential units on 0.5-acre lots or larger with private yards and private parking.
Low Residential (2.0–4.0 du/ac)	Detached, low-density single residential units on individual lots forming a cohesive neighborhood, with private yards and private parking.
Low Medium Residential (4.0–8.0 du/ac)	Detached or attached housing structures that contain either one or two individual dwelling units.
Medium Residential (8.0–14.0 du/ac)	Detached and attached residential units, including small-lot subdivisions, duplexes and triplexes, and attached townhouse-type developments that provide private open space and multiunit structures that comprise a cohesive development incorporating open space areas. Mobile home parks are allowed in this designation.
Medium High Residential (14.0–24.0 du/ac)	Low-rise condominiums and apartment buildings.
High Residential (24.0–30.0 du/ac)	Higher-density, multistory residential development.
Mixed Use	Combination of complementary commercial, office, residential, and community uses in areas with easy access to transit.
Office (0.40–1.0 FAR)	Office-oriented business activities, low-rise, multitenant garden-type arrangements; corporate headquarters; administrative and professional offices—finance, legal, insurance, real estate services, banks, and business support services. Supportive convenience retail and service commercial uses such as restaurants may be allowed to serve the needs of employees.
Neighborhood Commercial (0.25–0.35 FAR)	Small-scale shopping centers near or within residential neighborhoods and offering convenient retail goods and services, such as small-scale restaurants, grocery and convenience stores, service businesses that generate limited traffic, and boutique retail sales.
Community Commercial (0.25–0.35 FAR)	Larger retail, entertainment, and commercial service business centers such as larger retail uses, theaters, restaurants, professional and medical offices, and community facilities.
General Commercial (0.25–0.35 FAR)	Applies to properties along major activity corridors and provides for a wide range of community-oriented and region-oriented commercial businesses.

Table 4-2	Land Use Designations in the City and SOI Under Current General Plan
	Land Use Designations

Current General Plan Land Use Designation	Permitted Uses (General Description)
Industrial Park (0.40–0.60 FAR)	Light industrial, research and development businesses, green technology, general and medical office uses, and limited convenience goods and services for employees and visitors.
General Industrial (0.50–0.60 FAR)	Manufacturing, assembling, fabrication, wholesale supply, heavy commercial, green technology, and office uses.
Heavy Industrial (0.40–0.50 FAR)	Heavy manufacturing, compounding, processing or fabrication, warehousing, storage, freight handling, truck services and terminals, and supportive service commercial uses.
Open Space (0.0–0.1 du/ac)	Recreational uses, including golf courses, and one residential unit per 10 acres with at least one unit permitted on lots less than 10 acres.
Conservation	No habitable structures are permitted.
Flood Control/Utility Corridor	Flood control purposes and to support public utilities—flood control channels, drainage basins, and major utility corridors.
Civic/Regional (0.40–1.0 FAR)	Public and quasi-public uses—civic center, police station, county courthouse facilities, county jail/detention center, city fire stations, city libraries, post offices, and city public works yard.
Schools (0.10–0.20 FAR)	Elementary schools, junior high schools, high schools, and colleges.
Parks	Neighborhood-level and community-level parks, and multipurpose recreation-oriented lands,

Source: Rancho Cucamonga 2010. du/ac = dwelling unit(s) per acre FAR = floor area ratio

4.5 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the CEQA Guidelines defines cumulative impacts as "...two or more individual effects which, when considered together, as considerable or which compound or increase other environmental impacts." Cumulative impacts represent the changes caused by the incremental impact of a project when added to the proposed or committed projects in the vicinity. The CEQA Guidelines (§ 15130 [b][1]) state that the information used in an analysis of cumulative impacts should come from one of two sources:

- 1. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, projects outside the control of the agency; or
- 2. A summary of projections in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

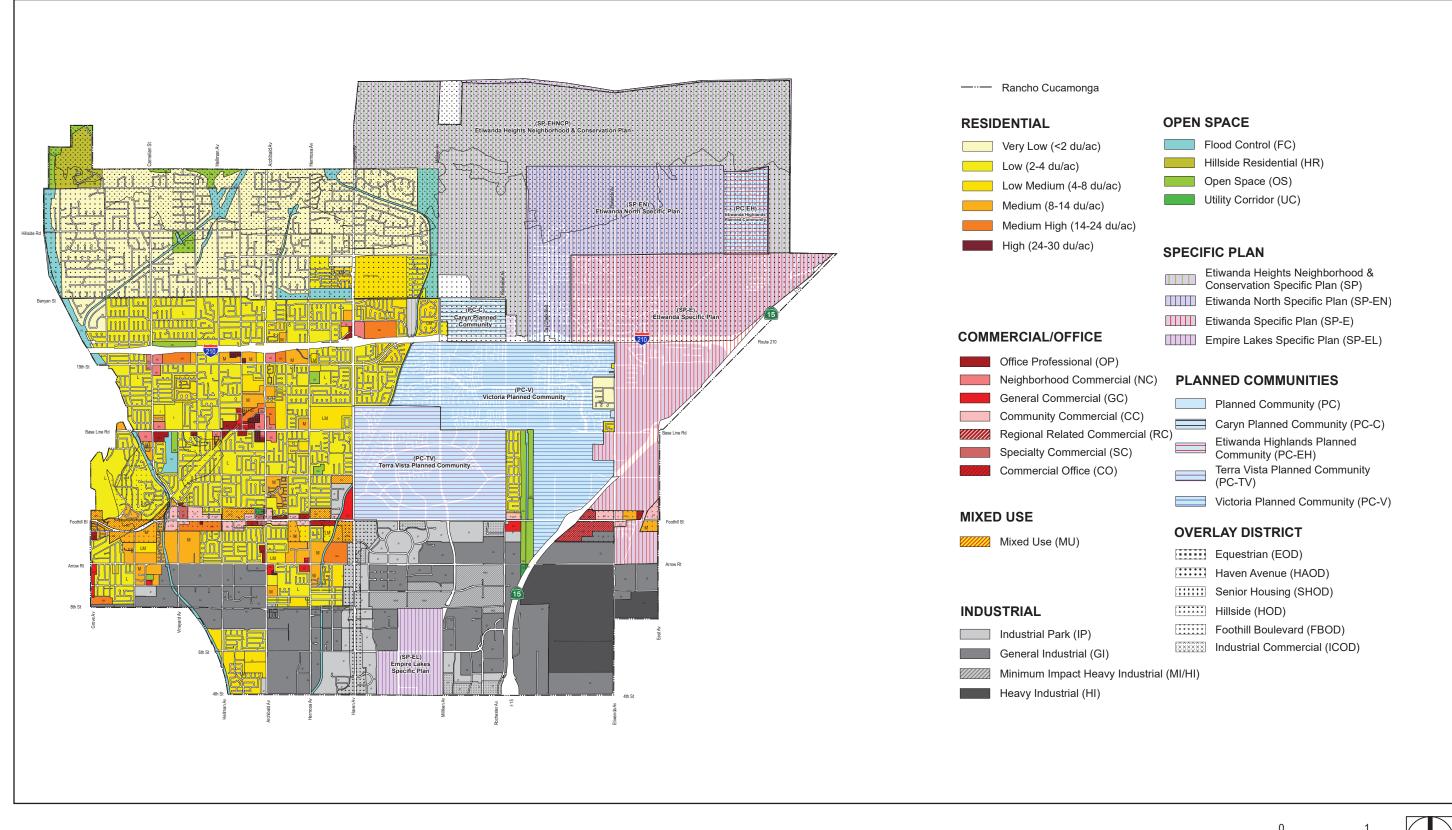


Figure 4-1 - Existing Zoning - City of Rancho Cucamonga 4. Environmental Setting

Scale (Miles)

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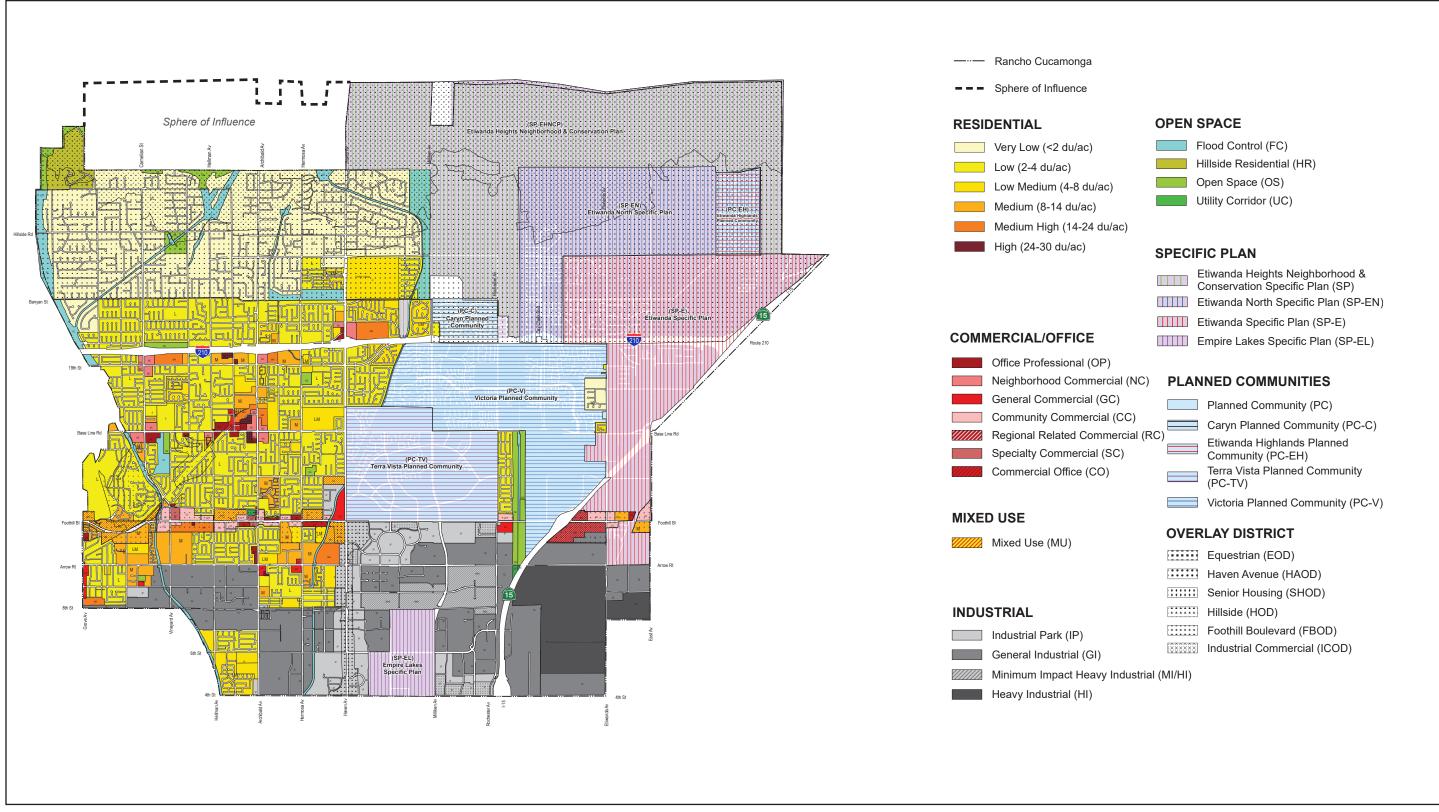


Figure 4-2 - Existing Zoning - Sphere of Influence 4. Environmental Setting



Scale (Miles)

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Depending on the environmental category, the cumulative impact analysis may use either method 1 or 2. The cumulative impacts analyses in this DEIR use method No. 2. The proposed project consists of the Rancho Cucamonga General Plan Update. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this DEIR analyzes the environmental impacts of development in accordance with buildout of the proposed land use plan. As a result, this DEIR addresses the cumulative impacts of development in the City of Rancho Cucamonga and the region surrounding it, as appropriate. In most cases, the potential for cumulative impacts is contiguous with the city boundaries and SOI boundaries. Potential cumulative impacts that have the potential for impacts beyond the city boundaries (e.g., traffic, air quality, noise) have been addressed through cumulative growth in the city and region. Regional growth outside Rancho Cucamonga is accounted for in traffic, air quality, and noise impacts through use of the San Bernardino County Congestion Management Program (CMP), which is a model that uses regional growth projections to calculate future traffic volumes. The growth projections adopted by the city and surrounding area are used for the cumulative impact analyses of this DEIR. Refer to Chapter 5, Environmental Analysis, for a discussion of the cumulative impacts associated with development and growth in the city and region for each environmental resource topic. A summary of the extent of cumulative impacts by environmental topic follows.

- Aesthetics: Coterminous with the City of Rancho Cucamonga and SOI boundaries.
- Agricultural and Forestry Resources: Coterminous with the City of Rancho Cucamonga and SOI boundaries but considers regional resources.
- Air Quality: Based on the regional boundaries of the South Coast Air Basin.
- Biological Resources: Coterminous with the City of Rancho Cucamonga and SOI boundaries but considers regional habitat loss in the southern California region based on the range of the protected species.
- Cultural Resources: Coterminous with the City of Rancho Cucamonga and SOI boundaries.
- Energy: Based on energy use within the city and SOI boundaries.
- Geological Resources: Within the city and SOI boundaries.
- Greenhouse Gas Emissions: Worldwide impacts based on the emissions sectors in the Scoping Plan in California (boundary).
- Hazards and Hazardous Materials: Within the city and SOI boundaries.
- Hydrology and Water Quality: Hydrology and water quality impacts would be within the Upper Santa Ana Watershed and Middle Santa Ana River Groundwater Basin, and flood impacts would be within the City of Rancho Cucamonga and SOI boundaries.
- Land Use and Planning: Within the city and SOI boundaries but considers regional land use planning based on SCAG.
- Mineral Resources: Within the city and SOI boundaries.
- Noise: Within the city and SOI boundaries.
- Population and Housing: Within the city and SOI boundaries.
- Public Services: Within the service area boundaries of the Rancho Cucamonga Fire Department, San Bernardino County Fire Department, CAL FIRE, and USFS; Rancho Cucamonga Police Department, San Bernardino County Sheriff's Department; Alta Loma School District, Central School District, Cucamonga Unified School District, Etiwanda School District, and Chaffey Joint Union School District; and the Rancho Cucamonga Public Library and San Bernardino County Library System.

- Recreation: Within the city and SOI boundaries.
- Transportation and Traffic: Considers regional transportation improvements identified in the SBCOG subregional transportation model and regional growth projections identified by SCAG.
- Tribal Cultural Resources: Within the city and SOI boundaries.
- Utilities and Service Systems: Water supply and distribution systems impacts would be within the service areas of Cucamonga Valley Water District (CVWD); wastewater conveyance and treatment would be within the service areas of the City of Rancho Cucamonga, CVWD, and the Inland Empire Utilities Agency (IEUA); storm drainage systems would be within the San Bernardino County Flood Control District service area; solid waste collection and disposal services would be in the City of Rancho Cucamonga and County of San Bernardino Solid Waste Management Division (SWMD) service areas; natural gas and electricity services would be within the Southern California Gas Company and Southern California Edison service areas, respectively.
- Wildfire: Within the service area boundaries of the Rancho Cucamonga Fire Department, San Bernardino County Fire Department, CAL FIRE, and USFS.

5. Environmental Analysis

Chapter 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This Chapter has a separate section for each environmental issue area that was determined to need further study in the EIR. The City determined the scope for this EIR based on review of the proposed General Plan, agency consultation, the Notice of Preparation (NOP), and comments in response to the NOP. Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Agricultural and Forestry Services
- 5.3 Air Quality
- 5.4 Biological Resources
- 5.5 Cultural Resources
- 5.6 Energy
- 5.7 Geology and Soils
- 5.8 Greenhouse Gas Emissions
- 5.9 Hazards and Hazardous Materials
- 5.10 Hydrology and Water Quality
- 5.11 Land Use and Planning
- 5.12 Mineral Resources
- 5.13 Noise
- 5.14 Population, Housing, and Employment
- 5.15 Public Services
- 5.16 Recreation
- 5.17 Transportation
- 5.18 Tribal Cultural Resources
- 5.19 Utilities and Service Systems
- 5.20 Wildfire

Sections 5.1 through 5.20 provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed.

5.1 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

To assist the reader with comparing information between environmental issues, each section is organized under nine major headings:

- Environmental Setting
- Thresholds of Significance
- Plans, Policies, Programs
- Environmental Impacts
- Cumulative Impacts
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation
- References

In addition, Chapter 1, *Executive Summary*, has a table that summarizes impacts by environmental issue.

5.2 TERMINOLOGY USED IN THIS DRAFT EIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No impact (NI).** The project would not change the environment.
- Less than significant (LTS). The project would not cause any substantial, adverse change in the environment.
- Less than significant with mitigation incorporated (LTSM). The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- Significant and unavoidable (SU). The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) discusses the potential impacts to the visual character of the City of Rancho Cucamonga and Sphere of Influence (SOI) from implementation of the General Plan Update.

Chapter Overview

This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would potentially be altered by the project's implementation, and the consistency of the project with established relevant policies. Cumulative impacts related to aesthetics would be coterminous with the City and SOI boundaries.

The General Plan Update would result in heightened urban development in the City of Rancho Cucamonga and its SOI, which would modify the existing visual quality of the city. Future development and redevelopment proposed under the General Plan Update would remain consistent with the existing design standards of the City's current General Plan, updated standard conditions of approval, and the municipal code, and would be subject to discretionary review by the appropriate commissions, committees, or the City Council. Overall, the development impact related to aesthetics is less than significant with application of laws and standard conditions of approval.

Heart of the Matter

The aesthetic and visual resources in a location give visitors and residents a sense of place, which is important to creating a community experience that is comfortable and memorable. The value placed on aesthetic resources allows a city to express its history, culture, and how it defines itself. It can also reflect the appreciation of a city government for its residents. The City of Rancho Cucamonga has accommodated a range of communities as it developed into its current form. These communities consist of single-family homes with traditional Southern California architecture, more recent multistory apartments focusing on a denser approach to housing, live-work units, and nearly everything in between. Rancho Cucamonga's priorities include providing pleasant places to walk, wander, and enjoy for pedestrians, cyclists, equestrians, and skateboarders. This focus creates a connection between people and the city and nature so that residents can enjoy their great city while interacting with each other. Stunning views of the outdoors can be enjoyed during recreational activities on a multitude of natural and rural open space trails in the city and SOI. Time in the outdoors can improve mental health, rejuvenate the spirit, promote relaxation, and increase the quality of life for Rancho Cucamonga's residents.

5.1.1 ENVIRONMENTAL SETTING

5.1.1.1 Regulatory Background

Visual resources in Rancho Cucamonga and its SOI are regulated primarily through the California Department of Transportation (Caltrans) (for state highways) and the Rancho Cucamonga General Plan and Municipal Code. Key state and local regulations follow.

State Regulations

Caltrans Scenic Highway Program

In 1963, California's Scenic Highway Program was created to preserve and protect the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The state laws governing this program are in the Streets and Highways Code, Sections 260 to 263, and Caltrans oversees the program. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Suitability for designation as a State Scenic Highway is based on three criteria described in Caltrans's Guidelines for Official Designation of Scenic Highways (2008) (Caltrans 2021):

- **Vividness.** The extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of visual elements.
- Intactness. The integrity of visual order and the extent to which the natural landscape is free from visual intrusions (e.g., buildings, structures, equipment, grading).
- **Unity.** The extent to which development is sensitive to and visually harmonious with the natural landscape.

Local Regulations

County of San Bernardino Scenic Routes

The County of San Bernardino General Plan identifies a number of scenic routes, and the County desires to preserve the scenic character of these visually important roadways. The scenic route nearest the city is the I-15 freeway from its junction with the I-215 freeway in the Cajon Pass, northeast to the Nevada state line. This segment is approximately 6.7 miles northeast of the boundary of the City of Rancho Cucamonga, outside of the city and SOI boundaries, and is not visible from the city or the SOI.

Local

City of Rancho Cucamonga General Plan

Chapter 2 of the 2010 General Plan, "Managing Land Use, Community Design, and Historic Resources," focuses on how land uses and historic resources shape the design of the community. Several goals and policies in Chapter 2 address aesthetics, scenic resources and the visual environment of the city. Chapter 6 of the 2010 General Plan, "Resource Conservation," focuses on maintaining, protecting, and preserving valuable natural resources. Some of the goals and policies in Chapter 6 address resource conservation regarding aesthetics, scenic resources, and the visual environment in the city (Rancho Cucamonga 2010).

Special Boulevards and Beautification Master Plans

The City of Rancho Cucamonga has designated certain streets as Special Boulevards, which are defined by a variety of patterns of landscape design, the layout of bike and pedestrian paths, the setback of structures, lighting, street furnishings, and hardscape treatments. The intent of the designation is to establish a certain character and consistency in the appearance of that roadway. The special boulevards are identified in the Community Design section of Chapter 2 of the 2010 General Plan.

The City of Rancho Cucamonga prepared beautification master plans in the late 1980s and 1990s for many of the special boulevards. The plans provided direction to development and established attractive design that would reinforce the City's high design standards. Design objectives of the beautification master plans include conceiving identifiable themes along major streets; producing attractive, enduring, and maintainable streetscapes; complementing other community improvements; and protecting the public's health, safety, and welfare (Rancho Cucamonga 2010a).

City of Rancho Cucamonga Municipal Code

The Rancho Cucamonga Municipal Code, Title 17, Development Code, identifies the types of permitted land uses on all parcels throughout the various assigned districts. The Development Code identifies applicable use regulations, criteria for site development, performance standards, and design regulations. These criteria, standards, and regulations include specifications for lot size, setbacks, open space, density, height, lighting, landscaped areas, fencing, building design, and parking for each of the zoning districts (Rancho Cucamonga 2021a).

Hillside Development Regulations

Chapter 17.52 and Section 17.122.020, "Hillside Development," of the Development Code include hillside development regulations to prevent the disturbance of natural slopes. These guidelines and development standards for architecture, development density, drainage, driveways/roadways, grading, landscaping, public safety, site design, trails and corrals, and walls and fences are for use during development review on all sites with slopes that are 5 percent or greater, as described following (Rancho Cucamonga 2021b):

- Slope Zone 2 (5 percent to 7.99 percent slope): Grading for development is permitted in these areas, but the natural character of landforms must be retained. To reduce the amount of grading, contour grading, combined slopes, limited cut and fill, split-level architectural prototypes, or padding for structures may be necessary, depending on individual site conditions.
- Slope Zone 3 (8 percent to 14.9 percent slope): Within this zone, special hillside architectural and design techniques that minimize grading are required. Techniques such as split-level foundations of greater than 18 inches, stem walls, stacking, and clustering can be used to ensure that architectural prototypes conform to the natural form.
- Slope Zone 4 (15 percent to 29.9 percent): Within this zone, development is limited to less visually prominent slopes; it must be able to show that impacts to safety, the environment, and aesthetics can be minimized on a project-specific basis. Development in these areas would include large lots, variable setbacks, and varied building structural techniques, such as stepped or pole foundations. Structures must be designed to blend with the natural environment through their shape, materials, and colors. To minimize the impact of traffic and roadways, natural contours or grade separations shall be used.
- Slope Zone 5 (30 percent and over): Development is prohibited in these areas with the exception of parcels that are south of Banyan Street; areas where at least 75 percent of the lots or parcels of the development site are surrounded by lots or parcels improved with

structures; where the proposed development appropriately addresses slope stability and other on-site geological factors; and where vegetation fuel management for wildfire protection can be achieved and maintained.

Light and Glare Regulations

Section 17.58.050 of the City's Development Code has general lighting requirements for all outdoor lighting. Lighting must be directed away and shielded from adjacent residential areas to prevent stray light or glare from becoming a nuisance on adjacent properties. The performance standards require lighting to be designed to illuminate at the minimum level necessary for safety and security to avoid spillover light and glare in residential districts and parking areas in an effort to avoid creating areas of intense light or glare (Rancho Cucamonga 2021c).

Tree Preservation Regulations

Section 17.80, "Tree preservation," protects trees that are a community resource from indiscriminate cutting or removal. This provision specifically intends to expand eucalyptus windrows that provide cumulative value as windbreaks by protecting selected blue gum eucalyptus windrows and planting new spotted gum eucalyptus windrows along the established grid pattern as development occurs. General provisions within this section address pruning of trees overhanging a street, nuisance trees, credit given for tree preservation, the conflict between structures and protected trees, and the use of explosives to remove trees. Section 17.80.040 is the tree replacement policy and states that where existing eucalyptus windrows must be removed, they must be replaced with spotted gum eucalyptus (*Eucalyptus maculata*), *Eucalyptus nicholii*, or other approved eucalyptus species. Other heritage tree removal requires replacement with the largest nursery-grown tree available and, if possible, relocation of the heritage tree to another location on the site would be preferred. Section 17.80.050, "Protection of existing trees," includes measures to protect preserved trees from damage, and Section 17.80.060, "Tree maintenance," identifies responsibilities for proper maintenance, irrigation, pruning, and fertilization of existing or newly planted trees.

Under Section 17.16.080, "Tree removal permit," an individual or corporation may not remove a heritage tree without obtaining a tree removal permit. A heritage tree is defined as any tree that meets at least one of the following criteria (Rancho Cucamonga 2021d):

- All eucalyptus windrows.
- Any tree in excess of 30 feet in height and having a single trunk diameter of 20 inches or more measured 4.5 feet from ground level.
- Multitrunk trees having a total diameter of 30 inches or more measured 4.5 feet from ground level.
- A stand of trees, the nature of which makes each dependent upon the others for survival.
- Any other tree that may be deemed historically or culturally significant by the planning director because of age, size, condition, location, or aesthetic qualities.

Standard Conditions of Approval

The City has existing regulations that relate to aesthetics and visual quality, compliance with which would reduce negative aesthetic impacts. Compliance with standard conditions would be required for all new development and redevelopment in the city.

- 5.1-1: A detailed on-site lighting plan, including a photometric diagram, shall be submitted by project applicants and reviewed and approved by the Planning Director and Police Department prior to the issuance of building permits. Such plan shall indicate style, illumination, location, height, and method of shielding so as not to adversely affect adjacent properties.
- 5.1-2: Solar access easements shall be dedicated for the purpose of assuming that each lot or dwelling unit shall have the right to receive sunlight across adjacent lots or units for use of a solar energy system. The easements may be contained in a Declaration of Restrictions for the subdivision which shall be recorded concurrently with the recordation of the final map or issuance of permits, whichever comes first. The easements shall prohibit the casting of shadows by vegetation, structures, fixtures, or any other object, except for utility wires and similar objects, pursuant to Development Code Section 17.08.060-G-2.

5.1.1.2 Existing Conditions

The City of Rancho Cucamonga enjoys a variety of high-quality visual resources within its lush and diverse landscape encompassing approximately 20,707 acres and another 3,735 acres in the SOI. The city is surrounded by developed municipalities to the west, south, and east, including the cities of Upland, Ontario, and Fontana and a large area of unincorporated San Bernardino County to the east and north. The northernmost part of the SOI is adjacent to the San Bernardino National Forest. Approximately 90 percent of the city is built out, with residential uses the most common land use, accounting for 55 percent of land within the city limits. The city's primary arterial corridors are I-15, which runs generally north-south and crosses the eastern part of the city, and SR-210, an east-west freeway that passes through the center of the city (Rancho Cucamonga 2010a, 2010b). The City has established various special districts to maintain streetscapes, lighting, parkways, and medians. These special districts include street lighting districts, landscape maintenance districts, community facilities districts, an assessment district, a benefit assessment district, and a park and recreation district (Rancho Cucamonga 2020).

Rancho Cucamonga is largely developed with a mix of old and new urban land uses at various densities and intensities. Historic communities include Alta Loma, Cucamonga, and Etiwanda, each with its own style of development. Development with more contemporary architectural styles include the Terra Vista, Victoria, and Caryn communities (Rancho Cucamonga 2010a, 2010b).

Rancho Cucamonga's structure, form, and character fall into three types—the residential neighborhoods, commercial and mixed-use nodes, and industrial corridors. These types are used to categorize development throughout the area by physical features such as character, form, and structure. The characteristics of each type are included here:

- Residential Neighborhoods: Most of Rancho Cucamonga's neighborhoods are typical of southern California suburban subdivisions post-1960—single-family detached units with some clusters of duplexes, townhomes, condominiums, and apartments. The architectural design characteristics echoe styles used throughout southern California, including ranch-style homes on lots from 5,000 square feet to one acre or more and homes with Spanish and Mediterranean influences that are surfaced with stucco and painted in earth tones. Lots larger than 10,000 square feet are typically in the northern third of the city, and smaller lots are south of Banyan Street. Residential neighborhoods are most dominant north of Foothill Boulevard, with some pockets south of Foothill Boulevard, mostly west of Haven Avenue. Higher density housing includes townhomes, condominiums, and apartment complexes that are typically newer and have architectural styles that create an external visual connection to the past while incorporating newer amenities. Residential areas are designed like typical suburban neighborhoods, with self-contained housing on cul-de-sacs and curvilinear streets. Homes include landscaping and trees that reflect the Mediterranean climate of the area.
- Commercial and Mixed Use-Nodes: In addition to neighborhood commercial centers, Rancho Cucamonga has several commercial nodes that serve as major employment centers and meet local and regional shopping needs. Generally, mixed-use parcels developed in the past twenty years are along Foothill Boulevard and 4th Street between Milliken and Utica north to the Metrolink station. Successful newer mixed-use developments include Victoria Gardens and the Town Center at Haven Avenue and Foothill Boulevard. Development standards for mixed-use development include interconnectedness; an emphasis on pedestrian orientation in site and building design; a walkable environment with active street frontages; well-scaled buildings; and usable public spaces such as courtyards, small plazas, and sidewalk cafes. Typically, buildings are at the rear of the property; surface parking is provided between the structures and street frontage; and landscaped pedestrian walkways with water features are scattered throughout mixed-use areas. Older commercial areas developed during the postwar boom tend to be independent, auto-oriented destinations with limited continuity in design, landscaping, amenities, or internal pedestrian connectivity.
- Industrial Corridors: Industrial corridors are generally south of Foothill Boulevard near the I-15 and I-10 freeways, the Metrolink station, and railway lines. Developments consist of light and heavy industrial, business parks, offices, manufacturing, distribution centers, etc. Older industrial uses are characterized as functional and large, with box-like buildings and limited architectural treatment. Many industrial sites are not landscaped and have minimal decorative screening or walls. These industrial areas typically lack unifying design elements.

Streetscapes and Gateways

Rancho Cucamonga is visible from roadways leading into the city, including I-15 and SR-210. There are gateway markers and entry monuments along these freeways at major streets along the southern, eastern, and western borders of the city that serve as unified identifying entryways. Enhanced roadway treatments throughout the city include landscaped medians, street trees, bicycle and pedestrian paths, setback of adjacent structures, street furnishings, and hardscape treatment—all part of the City's street beautification plans and special boulevard designation.

From I-15 travelers can see views of business parks and industrial uses at the southeastern section of the city, transitioning to commercial uses around Foothill Boulevard. The northeastern section of the city includes views of single-family homes and vacant land near the SR-210 interchange. Most views of the city from SR-210 are blocked by berms, block walls, and dense landscaping, except for partial views of commercial buildings near the ramps and near single-family homes in places where the freeway is at or above grade. Homes in the foothills are also visible at higher elevations. Views of the city from *I-5 Freeway*, 5.1-2, *Views from SR-210 Freeway*, and 5.1-3, *Views of the Foothill Areas*.

Scenic Resources

Rancho Cucamonga is at the eastern end of the San Gabriel Mountain range on the southern base. Views of the San Gabriel and San Bernardino Mountains are afforded from most of the city and provide a backdrop for the community, as shown in Figure 5.1-4, *Views of Nearby Scenic Mountains*. Unobstructed views of the San Gabriel Mountains to the north are provided from north-south roadways, such as Archibald, Haven, and Etiwanda Avenues, and views of the lower-lying valley to the south are provided from the foothills.

Other scenic resources in the city include stands of eucalyptus windrows, vineyards and orchards, and vegetation in flood-control channels and utility corridors. Views of wide-open spaces, natural vegetation, and steep slopes with limited development are provided by the foothills at the northern end of the city.

In general, visual resources in the city and SOI include scenic mountain views, scenic city views, prominent scenic vistas, and scenic corridors. While many residential and commercial property owners enjoy these views from their personal property, the City only evaluates scenic resources from public places.

- Scenic Mountain Views: Rancho Cucamonga features scenic mountain views of the nearby San Gabriel and San Bernardino Mountains to the north and northeast. These mountains rise to heights over 6,000 feet above mean sea level and are partially visible from most areas of the city. The foothills at the northern end of the city in the SOI afford views of scenic wide-open spaces, steep slopes, and natural vegetation.
- Scenic City Views: Roads that traverse Rancho Cucamonga provide scenic views of the city, its hillsides, and environs. The I-15 and SR-210 freeways afford views of the city, although some views are blocked by berms, block walls, and dense landscaping.
- **Prominent Scenic Vistas:** Significant vistas in the city include:
 - The view of the North Etiwanda Preserve from I-15, from the northeastern boundary of the city to the interchange with SR-210.
 - The view north to the San Bernardino and San Gabriel Mountains from SR-210.
 - The northern view of the San Bernardino foothills from major east-west streets south of West Foothill Boulevard.
 - The views of the San Gabriel Mountains from the city roadways south of West Foothill Boulevard. The Pacific Electric Trail, running east to west approximately 1,300 feet north of Base Line Road, extends through the city and features natural scenery and multiple benches to stop and view the mountains to the north.

- Residents who live on roads in the wildland-urban interface in the northern part of the city and SOI have direct canyon and mountain views from their residences.
- Trails and roads extending into the northern part of the SOI include viewpoints. One such viewpoint is South Panoramic, a vista point near the Etiwanda Falls Trailhead that offers views of the entire west end of the Inland Empire, including Rancho Cucamonga, Fontana, and other cities in Riverside County. This viewpoint has gazebos, picnic tables, and signage for visitors.
- Numerous parks throughout the city provide scenic vistas of the northern mountains.
- Scenic Corridors: Foothill Boulevard / Route 66 is not a designated scenic highway but is considered a historic route by residents of the city and has northern views of the mountains and hillsides.

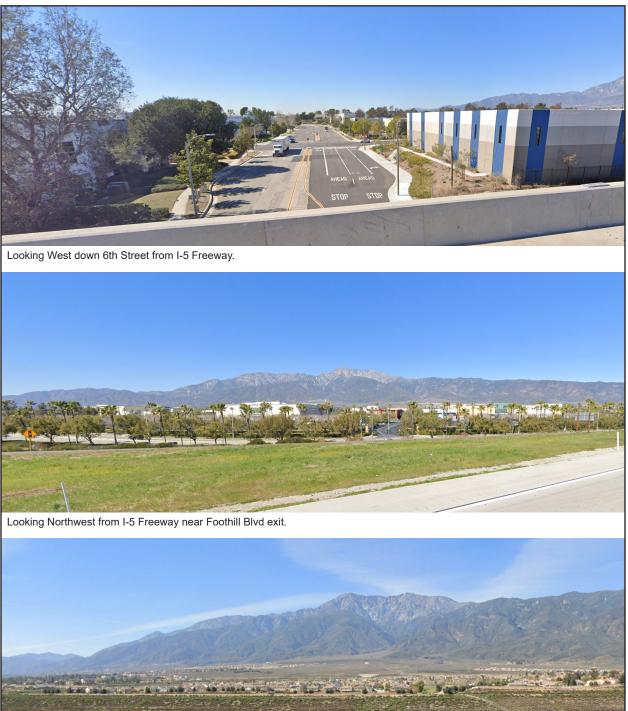
Scenic Highways

There are no state-designated scenic highways in Rancho Cucamonga or its SOI (Caltrans 2021). The nearest designated scenic highway is on the north side of the San Gabriel Mountains, along the Angeles Crest Scenic Highway (SR-2), approximately 12 miles from the northern boundary of the city. Another scenic highway, Rim of the World Scenic Highway (SR-38), is approximately 24 miles east of the city's boundary. These scenic highways are on the northern, eastern, and western slopes of the San Gabriel and San Bernardino Mountains and are far from Rancho Cucamonga and its SOI. There are other highways that are considered eligible scenic highways, but they are not visible from the city, nor are areas in the city or SOI visible from them (Rancho Cucamonga 2010b).

Light and Glare

The City of Rancho Cucamonga and SOI are in a relatively highly urbanized area and can experience high levels of nighttime illumination. Sources of light and glare in the city and SOI include building lighting (interior and exterior), security lighting, sign illumination, parkingarea lighting, and window illumination. Other sources of nighttime light and glare include streetlights and vehicular traffic along major thoroughfares and surrounding roadways. Although older residential streets tend to have lower levels of night lighting, they still have higher levels of lighting than newer suburban communities. There is also the potential for light pollution above Rancho Cucamonga due to unshielded night lighting and the frequency of overcast nights, when localized fog or regional cloud cover can reflect light back at the ground. The city is adjacent to more-urbanized cities, including Upland to the west, Ontario to the south and southwest, and Fontana to the east, which also affects ambient light in the community. However, Rancho Cucamonga is also guarded from excessive light spillover by the San Bernardino National Forest to the northwest and the North Etiwanda Preserve to the east, which have few sources of light, vacant land, and natural open space that allow for clear day and nighttime views.

Figure 5.1-1 - Views from I-5 Freeway 5. Environmental Analysis



Looking Northwest off I-5 Freeway 115B exit ramp.

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Figure 5.1-2 - Views from SR-210 Freeway 5. Environmental Analysis



Looking North up Day Creek Blvd. from SR-210 Freeway.



Looking North up Haven Ave from SR-210 Freeway overpass (Haven Ave).



Looking Southwest from SR-210 Freeway overpass, near Exit 57.

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Figure 5.1-3 - Views of the Foothill Areas 5. Environmental Analysis



Looking Northwest on Wilson Ave.



Looking North up Canistel Ave.



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Figure 5.1-4 - Views of Nearby Scenic Mountains 5. Environmental Analysis



View from top of Haven Ave.



View from Etiwanda Falls Trailhead.



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5.1.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- AE-1 Have a substantial adverse effect on a scenic vista.
- AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- AE-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.
- AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The General Plan Update identifies potential aesthetic impacts and methods to minimize the impacts to visual resources. The following General Plan policies are applicable to aesthetics:

Land Use and Community Character Element

- **GOAL LC-1: A CITY OF PLACES.** A beautiful city with a diversity and balance of unique and well-connected places.
- LC-1.2: Quality of Place. Ensure that new infill development is compatible with the existing, historic, and envisioned future character and scale of each neighborhood.
- LC-1.3: Quality of Public Space. Require that new developments incorporate the adjacent street and open space network into their design to soften the transition between private and public realm and creating a greener more human-scale experience.
- LC-1.5: Master Planning. When planning a site, there must be meaningful efforts to master plan the site so as to ensure a well-structured network and block pattern with sufficient access and connectivity to achieve the placemaking goals of this General Plan.
- **LC-1-8: Public Art.** Require new construction to participate in the acquisition and installation of public art in accordance with the City Public Arts Program.

- **LC-1.11: Compatible Development.** Allow flexibility in density and intensity to address specific site conditions and ensure compatibility of new development with adjacent context.
- **LC-1.12:** Adaptive Reuse. Support the adaptive reuse of historic properties consistent with neighborhood character.
- **C-1.14: Street Amenities and Lighting.** Modify pedestrian and street amenities, lighting styles, and intensities to be compatible with the character of the surrounding neighborhoods.
- **GOAL LC-2: HUMAN SCALED.** A city planned and designed for people fostering social and economic interaction, an active and vital public realm, and high levels of public safety and comfort.
- LC-2.1: Building Orientation. Require that buildings be sited near the street and organized with the more active functions—entries, lobbies, bike parking, offices, employee break rooms, and outdoor lunch areas—facing toward and prominently visible from the street and visitor parking areas.
- LC-2.2: Active Frontages. Require new development abutting streets and other public spaces to face the public realm with attractive building facades and entries to encourage walking, biking, and public transit as primary—not "alternative"—mobility modes.
- LC-2.4: Tree planting. Require the planting of trees that shade the sidewalks, buffer pedestrians from traffic, define the public spaces of streets, and moderate high temperatures and wind speeds throughout the city.
- **LC-2.5: Gradual Transitions.** Where adjacent to existing and planned residential housing, require that new development of a larger form or intensity transition gradually to complement the adjacent residential uses.
- LC-2.6: Commercial Requirements. Require development projects in nonresidential and mixed-use areas to provide for enhanced pedestrian activity through the following techniques:
 - Require that the ground floor of buildings where retail uses are allowed have a minimum 15 feet floor-to-floor height.
 - Require that the ground floor of the building occupy the majority of the lot's frontage, with exceptions for vehicular access where necessary.
 - Require that most of the linear ground floor retail frontage (where such occurs) be visually and physically "open" to the street, incorporating windows and other design treatments to create an engaging street frontage.
 - Minimize vehicle movements across the sidewalk.
 - Allow for and encourage the development of outdoor plazas and dining areas.

- **LC-2.7: Shared Parking.** Encourage structured and shared parking solutions that ensure that parking lots do not dominate street frontages and are screened from public views whenever possible.
- **LC-2.8: Landscaping.** Require development projects to incorporate high quality landscaping to extend and enhance the green space network of the city.
- **GOAL LC-4: COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- **LC-4.1: Neighborhood Preservation.** Preserve and enhance the character of existing residential neighborhoods.
- LC-4.3: Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well structured such that the physical layout and land use mix promote walking to services, biking, and transit use and have the following characteristics.
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.
 - Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile.
 - Require development patterns such that 60 percent of dwelling units are within one-half mile walking distance to neighborhood goods and services, such as markets, cafes, restaurants, churches, dry cleaners, laundromats, farmers markets, banks, hair care, pharmacies, and similar uses.
 - access to goods and services within a safe, comfortable walking distance.
 - Provide as wide a diversity of housing styles and types as possible, appropriate to the existing neighborhood context.
 - Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.6: Block Length. Require new neighborhoods to be designed with blocks no longer than 600 feet nor a perimeter exceeding 1,800 feet. Exceptions can be made if mid-block pedestrian and bicycle connections are provided, or if the neighborhood is on the edge of town and is intended to have a rural or semi-rural design character.
- LC-4.10: Neighborhood Transitions. Require that new neighborhoods provide appropriate transitions in scale, building type, and density between different General Plan designations, place types, and community planning areas.

- LC-4.11: Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building and housing types, and lack of walking or biking access to parks, schools, goods, and services.
- LC-4.12: Neighborhood Edges. Encourage neighborhood edges along street corridors to be characterized by active frontages, whether single-family or multifamily residential, or ground-floor, neighborhood-service nonresidential uses. Where this is not possible due to existing development patterns or envisioned streetscape character, neighborhood edges shall be designed based on the following policies:
 - Strongly discourage the construction of new gated communities except in semi-rural neighborhoods.
 - Allow the use of sound walls to buffer new neighborhoods from existing sources of noise pollution such as railroads and limited access roadways.
 - Prohibit the use of sound walls to buffer residential areas from arterial or collector streets. Instead design approaches such as building setbacks, landscaping and other techniques shall be used.
 - In the case where sound walls might be acceptable, require pedestrian access points to improve access from the neighborhoods to nearby commercial, educational, and recreational amenities; activity centers; and transit stops.
 - Discourage the use of signs to distinguish one residential project from another. Strive for neighborhoods to blend seamlessly into one another.
 If provided, gateways should be landmarks and urban design focal points, not advertisements for home builders.
- **GOAL LC-5: CONNECTED CORRIDORS.** A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.
- LC-5.5: Foothill Boulevard as a Gateway. Transform the ends of Foothill Boulevard near the city boundary to a unique gateway environment through street improvements and coordinated infill development along both sides of Foothill Boulevard.
- **GOAL LC-7: ROBUST DISTRICTS.** A series of unique, employment-oriented environments for a range of business activities, shopping and entertainment, and community events and gathering.
- LC-7.3: Campus Design. Encourage employment areas to be developed like a college campus, with buildings oriented toward an internal roadway, buffer landscaping along the perimeter, and ample opportunities for paths and trails connecting to the City system as well as relaxation areas for employees.

LC-7.6: Loading Docks. Require that parking lots, loading docks, outdoor storage, and processing be located behind or beside buildings, not in front, and be screened from public views.

Open Space Element

- **GOAL OS-1: OPEN SPACE.** A complete, connected network of diverse parks, trails, and rural and natural open space that supports a wide variety of recreational, educational, and outdoor activities.
- **OS-1.4: Design Character and Public Art.** Require neighborhood parks, greens, and playgrounds to be designed as an integral element of their planning community, reflecting the design character, art, and culture of that neighborhood, center, or district.
- **GOAL OS-2: TRAILS.** A complete, connected network of diverse trails and connected open space that improves access to all areas of the city and encourages nonmotorized activities.
- **OS-2.8: Art and Education.** Require public art, education, and recreation features on trails, where appropriate.

Mobility and Access Element

MA-2.5: Context. Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.

Resource Conservation

- **GOAL RC-1:** VISUAL RESOURCES. A beautiful city with stunning views of the San Gabriel Mountains and the Inland Empire.
- **RC-1.1:** View Corridors. Protect and preserve existing signature public views of the mountains and the valleys along roadways, open space corridors, and at other key locations.
- **RC-1.2:** Orient toward View Corridors. Encourage new development to orient views toward view corridors, valley, and mountains.
- C-1.3: Transfer of Development Rights. Allow the transfer of development rights from conservation areas to select development areas throughout the city and sphere of influence to protect hillsides, natural resources, and views and to avoid hazards and further the City's conservation goals.
- **RC-1.4:** Dark Sky. Limit light pollution from outdoor sources, especially in the rural, neighborhood, hillside, and open spaces to maintain darkness for night sky viewing.

- **RC-1.5: Transit Corridor Views.** Require that new development along major transit routes and travel corridors include 360° project design and landscape or design screening of outdoor activity and storage, including views from the transit routes and travel corridors.
- **RC-1.6:** Hillside Grading. Grading of hillsides shall be minimized, following natural landform to the maximum extent possible. Retaining walls shall be discouraged and, if necessary, screened from view.

5.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.1-1: Development in accordance with the General Plan Update would not substantially alter or damage scenic vistas or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. [Thresholds AE-1 and AE-2]

The General Plan Update would allow for development of currently undeveloped parcels, redevelopment of currently developed parcels, and intensification of land uses in some areas of the city. Open space areas, parks, and agricultural lands that currently provide views of scenic vistas would continue to be preserved under the General Plan Update. The generally low-density residential uses, estate, and rural residential uses within or adjacent to these scenic vistas and resources would also remain unchanged, thereby preserving views of these scenic vistas and resources. The existing and proposed scale and design of the city, along with its existing and future land uses, complement rather than detract from the backdrop scenery of the northern mountains, hillsides, and rural environment. The high elevation of the northern mountains ensures that they will remain a scenic backdrop to Rancho Cucamonga and its SOI without interference from future development accommodated by the General Plan Update. Furthermore, design standards under the City's municipal code guide future development characteristics, such as height and placement of buildings and structures, setback requirements, and architectural design parameters. For instance, Development Code Section 17.122.020 minimizes grading to preserve natural features and retain the natural slope, and encourages clustering, variable setbacks, multiple orientations, and other site-planning techniques to preserve open spaces, protect natural features, and offer views to residents. It also encourages retention of prominent features, rooflines that follow natural slopes, and view openings of natural features. Therefore, public vistas and scenic resources from publicly accessible locations in and surrounding Rancho Cucamonga and its SOI would not be adversely impacted.

As discussed previously, there are no scenic highways in or near the city or the SOI that would be adversely affected by future development under the General Plan Update. Although views from the I-15 and SR-210 freeways would change with future development, these freeway segments are not designated scenic highways. Foothill Boulevard / Route 66 is considered an unofficial historic route by the City. Although future development and redevelopment along the Foothill Boulevard / Route 66 corridor may alter views of scenic resources, the place types and focus areas approach taken with the General Plan will enhance the streetscape and create a unified theme for this major corridor. General Plan Update policies that would protect scenic corridors include:

- **RC-1.1** View Corridors. Protect and preserve existing signature public views of the mountains and the valleys along roadways, open space corridors, and at other key locations.
- **RC-1.5** Transit Corridor Views. Require that new development along major transit routes and travel corridors include 360° project design and landscape or design screening of outdoor activity, and storage, including views from the transit routes and travel corridors.

Therefore, there would be no impact to scenic vistas or highways by the General Plan Update and the City's beautification master plans for designated special boulevards, as well as design guidelines for these special boulevards, would ensure that special boulevards remain unaffected.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.1-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.1-1 would be less than significant.

Impact 5.1-2: Buildout in accordance with the proposed land use plan would alter the existing visual appearance of the city and SOI, but would not substantially degrade its existing visual character or quality. [Threshold AE-3]

Future development and redevelopment facilitated under the General Plan Update would allow for new development of currently undeveloped parcels and intensification of already developed areas in Rancho Cucamonga. Although new development would alter the visual appearance of the city, because the city is largely already developed with urban and suburban uses, it would not substantially degrade Rancho Cucamonga's visual character or quality. Buildout proposed under the General Plan Update would most often occur within areas that are already developed and urbanized, or areas that are planned for development. Under the implementation of the General Plan Update, areas designated as open space, parks, and agricultural lands would remain undeveloped.

Rancho Cucamonga is characterized by its diverse residential neighborhoods, which include historic, older, and newer neighborhoods. Historic neighborhoods consist of single-family and small-scale multifamily dwellings, and older neighborhoods are characterized by diverse architectural designs and qualities, reflecting their age. Newer neighborhoods have smaller lot sizes for single-family detached units to allow for a higher proportion of green space and amenities.

The General Plan Update goals and policies ensure that future development and redevelopment will enhance vitality, context, form, and function. These policies support

districts and development in the city and seek to establish and/or retain their unique sense of place. The General Plan Update calls for preserving the historic character of recognized neighborhoods, the rural character of Rancho Cucamonga's northern SOI, the unique character of the Town Center, and the natural topography of the city and SOI. It also calls for incorporating public art into city design. Therefore, implementation of the General Plan Update would not introduce a substantial amount of new development or intensify development to the point that it would damage or substantially alter the existing visual character or quality of the city.

The goals and policies of the General Plan Update are implemented through residential and nonresidential design guidelines and specifications, standard conditions of approval, and streetscape master plans that provide guidance and regulations for the preferred or required design of buildings, landscaping, streetscapes, and public spaces. Development under the General Plan Update would be required to comply with existing City regulations that maintain the city's character, including the hillside development regulations, tree preservation ordinance, beautification master plans for designated special boulevards, design guidelines for residential and commercial-industrial land, sign ordinance, and landscape design guidelines. These regulations would encourage high-quality design and provide for welldesigned and attractive development that promotes a sense of community. Title 17 of the Rancho Cucamonga Municipal Code is the Development Code and governs the development and use of property through the implementation of development standards that are intended to preserve public visual resources and maintain the aesthetic appearance of residential neighborhoods and nonresidential properties and corridors. Compliance with the Development Code would ensure that development under the General Plan Update would continue to maintain and be compatible with the city's visual character.

The General Plan Update's Land Use, Community Character, Open Space, Mobility and Access, and Resource Conservation Elements' goals and policies (listed in Section 5.1.3) also ensure that the city's visual character is preserved.

The overarching goals and of these policies include compatibility, cohesion, and integration of development; well-maintained districts and neighborhoods contributing to character and identity; diverse housing that enhances livability; and high-quality architecture.

By complying with the City's existing regulations, including standard conditions of approval, and the General Plan Update policies, future development would be built to reflect and maintain Rancho Cucamonga's existing visual character and resources.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.1-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.1-2 would be less than significant.

Impact 5.1-3: Development in accordance with the General Plan would not generate substantial additional light and glare. [Threshold AE-4]

The two major causes of light pollution are glare and spill light. Spill light is caused by misdirected light that illuminates outside the intended area. Glare is light that shines directly or is reflected from a surface into a viewer's eyes. Spill light and glare impacts are effects of a project's exterior lighting on adjoining uses and areas.

Sources of light in the city include building lighting (interior and exterior), security lighting, sign illumination, sports fields lighting, and parking-area lighting. These sources of light and glare are mostly associated with the residential, commercial, and industrial uses and the larger community parks in the more developed areas of the city. Other sources of nighttime light and glare include streetlights, vehicular traffic along surrounding roadways, and ambient lighting from surrounding communities.

Future development in accordance with the General Plan Update would occur in areas designated for development and would allow for development of currently undeveloped parcels and intensification and redevelopment of existing land uses, which could increase nighttime light and glare in Rancho Cucamonga. For instance, the conversion of underutilized or vacant areas into residential or commercial uses would introduce new sources of light, but the General Plan Update maintains land use designations in much of the city and SOI, including areas along the northern boundary. These would remain rural residential, low density residential, and open space general, ensuring that light and glare are minimized in areas adjacent to the San Bernardino National Forest.

Development and redevelopment projects in the city would be required to comply with the design guidelines for residential and commercial-industrial land, sign ordinance, and landscape design guidelines, including guidelines for style, illumination, location, height, and methods of shielding to not adversely affect adjacent properties. Future development and redevelopment would also be required to comply with the outdoor lighting standards in Chapter 17.58 of the municipal code. The outdoor lighting standards require lighting to be directed away and shielded from adjacent residential areas; prohibit the creation of areas with intense light or glare; and call for the use of fences, walls, berms, screens, and landscaping to reduce light and glare spillover.

These General Plan Update policies specifically minimize light and glare:

- C-1.14 Street Amenities and Lighting. Modify pedestrian and street amenities, lighting styles and intensities to be compatible with the character of the surrounding neighborhoods.
- **RC-1.4** Dark Sky. Limit light pollution from outdoor sources, especially in the rural, neighborhood, hillside, and open spaces to maintain darkness for night sky viewing.

By ensuring that all future development projects comply with the municipal code and General Plan Update policies pertaining to light and glare, any potential spillover would be minimized.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.1-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.1-3 would be less than significant.

5.1.5 CUMULATIVE IMPACTS

Cumulative aesthetic impacts are based on potential changes to the visual quality in the city, the SOI, and the surrounding area. More intense urban development in Rancho Cucamonga and in the adjacent cities and unincorporated County area is expected as vacant land is used for development of new residential, commercial, light industrial and other institutional or public land uses, or the redevelopment of older structures. This future development would alter the visual quality of the landscape through the introduction of structures in currently open areas and the redevelopment of older structures to other land uses or to higher density/intensity uses. Future development would contribute to the cumulative loss of undeveloped land in Rancho Cucamonga, adjacent cities, and San Bernardino County. The permanent change in visual character of the city and surrounding areas from past and future development would be considered a significant cumulative impact.

Future development and redevelopment proposed under the General Plan Update would remain consistent with the design standards of the City's current General Plan and standard conditions of approval, and would be subject to discretionary review by the Planning Commission and/or City Council as well as final design review by the Design Review Committee. As determined throughout this analysis, all development that adheres to the General Plan Update goals and policies, municipal code, and development standards would result in less than significant aesthetic impacts. However, although the visual character of Rancho Cucamonga and its SOI would only incrementally change as development intensity increases, when combined with past development in the city and SOI, the General Plan's contribution to the visual impact would be cumulatively considerable.

There are no scenic highways in the City of Rancho Cucamonga or its SOI that would be affected by development. Therefore, the project would not contribute to cumulative impacts to scenic resources in the vicinity of a scenic highway and there would be no impact.

Past development in the City of Rancho Cucamonga and SOI have added substantial sources of light and glare to the area, which is considered a significant cumulative impact. New sources of light and glare, as well as an overall increase in lighting levels, would be introduced with new development and redevelopment in the city and its SOI. Glass and glazing in new structures would potentially create additional sources of glare in the area. While compliance with the General Plan Update goals and policies, the City's standard conditions of approval, and the municipal code would prevent light spillover and adverse impacts on adjacent light-sensitive uses, when combined with past and future development in the adjacent cities and unincorporated County area, the project's contribution to the cumulative impact would be

cumulatively considerable.

5.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, project-specific impacts would be less than significant, but the General Plan Update's contribution to cumulative impacts would be considerable.

5.1.7 MITIGATION MEASURES

No mitigation measures are available to reduce the General Plan Update's contribution to cumulative impacts on aesthetics related to past development in the City of Rancho Cucamonga and in the adjacent cities and unincorporated County that contributed to overall increase in lighting levels in the region.

5.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

5.1.9 REFERENCES

California Department of Transportation (Caltrans). 2021. Scenic Highways: California State Scenic Highway. Accessed May 27, 2021. https://dot.ca.gov/programs/design/laplandscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Rancho Cucamonga, City of. 2010a. Rancho Cucamonga 2010 General Plan Update.

- ———. 2010b. Rancho Cucamonga 2010 General Plan Update Draft Environmental Impact Report Volume I. SCH No. 2000061027.
- ———. 2020. Special Districts. Accessed May 28, 2021. https://www.cityofrc.us/yourgovernment/special-districts.
- ——. 2021a. Development Code. Title 17 of Rancho Cucamonga Municipal Code.
- ------. 2021b. Establishment of Slope Zoning Limitations. Section 17.52.020 of Rancho Cucamonga Municipal Code.
- ———. 2021c. General Lighting Requirements. Section 17.58.050 of Rancho Cucamonga Municipal Code.
- ——. 2021d. Tree Removal Permit. Section 17.16.080 of Rancho Cucamonga Municipal Code.

5.2 AGRICULTURE AND FORESTRY RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Rancho Cucamonga General Plan Update to impact agriculture and forestry resources in the City of Rancho Cucamonga and its sphere of influence (SOI). Cumulative impacts related to agriculture and forestry resources would be contiguous with the city and SOI boundary, but also consider agricultural resources within the County.

Chapter Overview

This chapter concludes that the conversion of Important Farmland to nonagricultural uses would result in a significant and unavoidable impact. Although unconventional agriculture would continue to be operational (indoor growing, community plots, etc.), no agricultural lands designated by the California Department of Conservation as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance would be preserved under the General Plan Update. Because there is no forest land or timberland in the city, there would be no loss of forest land and therefore no impact.

Heart of the Matter

Although the entire city was once an agricultural area, few large open areas remain that could support commercial agricultural production today. Though some agricultural uses are encouraged, the historic agriculture businesses in the city are largely gone. Though the city today is too developed to support large-scale agriculture, cumulative impacts to agricultural lands occur on a regional scale, and the loss of agricultural land on individual project sites could affect agricultural production in the county.

5.2.1 ENVIRONMENTAL SETTING

5.2.1.1 Regulatory Background

State Regulations

California General Plan Law

The California Government Code (§ 65302(d)) requires the general plan to include an open space and conservation element for the conservation, development, and utilization of natural resources—including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element must consider the effect of development on natural resources that are on public lands. The element must also cover:

- The reclamation of land and waters.
- Prevention and control of the pollution of streams and other waters.
- Regulation of the use of land for the accomplishment of the conservation plan.
- Prevention, control, and correction of the erosion of soils, beaches, and shores.

- Protection of watersheds.
- Location, quantity, and quality of the rock, sand, and gravel resources.
- Waterways, flood corridors, riparian habitats, and land that may accommodate floodwater for groundwater recharge and stormwater management.

In October 2017, the state legislature passed SB 732, which authorizes a city to develop an agricultural land component of the open space element or a separate agricultural element in its general plan. For local governments that choose this option, the bill authorizes the Department of Conservation to award grants, bond proceeds, and other assistance provided the element meets certain requirements.

Farmland Mapping and Monitoring Program

The California Natural Resources Agency is charged with restoring, protecting, and maintaining the state's natural, cultural, and historical resources. Within it, the State Department of Conservation (DOC) provides technical services and information to promote informed land use decisions and sound management of the State's natural resources. DOC manages the Farmland Mapping and Monitoring Program (FMMP), which supports agriculture throughout California by developing maps and statistical data for analyzing land use impacts to farmland. Every two years, FMMP publishes a field report for each county in the state. The most recent field report for San Bernardino County was published in 2014. The field report categorizes land by agricultural production potential, according to the following classifications:

- Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. Prime Farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agriculture production at some time during the four years prior to the mapping date.
- Farmland of Statewide Importance is similar to Prime Farmland, but with minor shortcomings, such as steeper slopes or less ability to store moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been farmed at some time during the four years prior to the mapping date.
- Farmland of Local Importance includes all farmable land within San Bernardino County not meeting the definitions of "prime farmland," "farmland of statewide importance," and "unique farmland" and not irrigated. This includes land that is not covered by above categories but is of high economic importance to the community. These farmlands include dryland grains of wheat, barley, oats, and dryland pasture.
- **Grazing Land** is the land on which the existing vegetation is suited to the grazing of livestock.
- **Confined Animal Agriculture** lands include poultry facilities, feedlots, dairy facilities, and fish farms. In some counties, confined animal agriculture is a component of the farmland of local importance category.

- Nonagricultural and Natural Vegetation includes heavily wooded, rocky, or barren areas; riparian and wetland areas; grassland areas that do not qualify for grazing land due to their size or land management restrictions; small water bodies; and recreational water ski lakes. Constructed wetlands are also included in this category.
- Semi-agricultural and Rural Commercial Land includes farmstead, agricultural storage and packing sheds, unpaved parking areas, composting facilities, equine facilities, firewood lots, and campgrounds.
- Vacant or Disturbed Land includes open field areas that do not qualify for an agricultural category, mineral and oil extraction areas, off-road vehicle areas, electrical substations, channelized canals, and rural freeway interchanges.
- **Rural Residential Land** includes residential areas of one to five structures per 10 acres.
- Urban and Built-Up Land is occupied by structures with a building density of at least one unit per 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential structures, industrial structures, commercial structures, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment structures, and water control structures.
- Water is used to describe perennial water bodies with an extent of at least 40 acres.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, better known as the Williamson Act, conserves agricultural and open space lands through property tax incentives and voluntary restrictive land use contracts administered by local governments under State regulations. Private landowners voluntarily restrict their land to agricultural and compatible open space uses under minimum 10-year rolling term contracts, with counties and cities also acting voluntarily. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

Nonrenewal status is applied to Williamson Act contracts that are within the nine-year termination process, during which the annual tax assessment for the property gradually increases.

Forestland and Timberland Protection

State regulations such as the Forest Taxation Reform Act of 1976 and the Z'berg-Nejedly Forest Practice Act of 1973 (California Forest Practice Act) provide for the preservation of forest lands from encroachment by other, incompatible land uses and for oversight of the management of forest practices and forest resources.

Public Resources Code Section 12220(g) defines "forest land" for the purposes of CEQA as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water-quality, recreation, and other public benefits.

The California Timberland Productivity Act of 1982, like the Land Conservation Act, was passed to encourage the production of timber resources. Government Code Section 51104(g) defines

"Timber," "Timberland," and "Timberland Production Zone" for the purposes of CEQA and "Timberland Preserve Zone," which may be used in city and county general plans.

- **"Timber"** means trees of any species maintained for eventual harvest for forest production purposes, whether planted or of natural growth, standing or down, on privately or publicly owned land, including Christmas trees, but does not mean nursery stock.
- **"Timberland"** means privately owned land, or land acquired for State forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre.
- "Timberland Production Zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, "Timberland Preserve Zone" means "Timberland Production Zone."

County boards of supervisors may designate areas of timberland preserve, referred to as Timberland Production Zones, which restrict the land's use to the production of timber for an initial 10-year term in return for lower property taxes.

Regional Regulations

San Bernardino County General Plan

The San Bernardino County General Plan contains policies to support agricultural uses. The conservation element includes policies to preserve prime farmland, unique farmland, and farmland of local importance; maintain the county's natural resources' base; ensure that sufficiently low development densities and building controls are applied to protect visual and natural qualities of areas within the county; encourage compatible agricultural uses; work to reduce soil erosion and sedimentation while balancing agricultural productivity; protect current and future extraction of mineral resources while minimizing the impacts on the environment; protect agricultural lands from the effects of nonagricultural development; and utilize the provisions of the Williamson Act to preserve commercially viable agricultural land. Additionally, the land use element includes policies to identify areas where agricultural base of the county economy and encourage the open space values of these uses; provide areas for both intensive and extensive agricultural pursuits; and identify areas of commercially viable prime and nonprime agricultural soils and operations.

Local Regulations

Rancho Cucamonga Municipal Code

Section 17.32.030 specifically identifies agricultural uses that are permitted or conditionally permitted on lots that are two and a half acres or more.

Permitted uses:

- a) Farms for orchards, trees, field crops, truck gardening, flowering gardening, and other similar enterprises carried on in the general field of agriculture.
- b) Raising, grazing, breeding, boarding or training of large or small animals: except concentrated lot feeding and commercial poultry and rabbit raising enterprises, subject to the following:
 - i. Cats and dogs shall be limited to the keeping of no more than four cats and/or four dogs, over four months of age.
 - ii. Small livestock are allowed with the number of goats, sheep, and similar animals limited to 12 per acre of total gross area, with no more than one male goat.
 - iii. Cattle and horses, including calves and colts over six months of age, with a maximum number of four animals per acre of total gross area.
 - iv. Combinations of the above animals provided the total density on any given parcel shall not exceed that herein specified.
 - v. In no event shall there be any limit to the permissible number of sheep which may be grazed per acre, where such grazing operation is conducted on fields for the purpose of cleaning up unharvested crops, stubble, volunteer, or wild growth and further, where such grazing operation is not conducted for more than four weeks in any six-month period.
- c) Aviary shall be limited to 50 birds per acre.
- d) An apiary is permitted provided that all hives or boxes housing bees shall be placed at least 400 feet from any street, road, highway, public school, park, property boundary, and from any dwelling or place of human habitation other than that occupied by the owner or caretaker of the apiary. Additionally, a water source shall be provided on-site.
- e) Retail sale of products raised on the property excluding retail nurseries and sale of animals for commercial purposes.

Conditional use permit required:

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

Standard Conditions of Approval

There are no existing regulations that reduce impacts on agricultural and forestry resources.

5.2.1.2 Existing Conditions

Rancho Cucamonga is urbanized and largely developed. However, there are undeveloped areas with existing agricultural land in the form of vineyards and orchards that remain from the city's agricultural past. Generally, these consist of 3- to 30-acre parcels at the following locations, as shown in Figure 5.2-1, *Agricultural Lands*:

- Northeastern corner of Haven Avenue and 4th Street (vineyard)
- North of Arrow Highway and east of I-15 (vineyard)
- South of Foothill Boulevard and west of Day Creek Channel (plant nursery under transmission lines)
- Orchards on both sides of Etiwanda Avenue, north of SR-210
- South of Foothill Boulevard and west of Deer Creek (vineyard)
- Southeast of the I-15 at Etiwanda Avenue (vineyard)
- South of Victoria Street and west of East Avenue (vineyard)
- Northwest corner of Banyan Street and Hellman Avenue (orchard)
- Corner of Church Street and Ramona Avenue (orchard)

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

These existing agricultural uses are designated "Farmland" under the FMMP, as shown in Table 5.2-1, *Existing Farmland Resources*. Most of the undeveloped vacant land at the base of the San Gabriel Mountain foothills in the City's SOI is designated Grazing Land. As shown in Table 5.2-1, approximately 7,352 acres of agricultural lands exist in the city and SOI. There are 138.55 acres of Important Farmland (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland) in the city and SOI.

Table 5.2-1Existing Farmland Resources

Farmland Designation	Plan Area (acres)	Percentage
Urban and Built-Up Land	23,282.96	74.05
Grazing Land	7,214.37	22.94
Prime Farmland	13.37	0.04
Farmland of Statewide Importance	0.06	<0.01
Unique Farmland	125.12	0.40
Other Land	806.19	2.56
Total	31,442.07	100%

Source: California Department of Conservation

There are no lands under Williamson Act contract in the city.

5.2.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- AG-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use.
- AG-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- AG-3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).
- AG-4 Result in the loss of forest land or conversion of forest land to non-forest use.
- AG-5 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

5.2.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

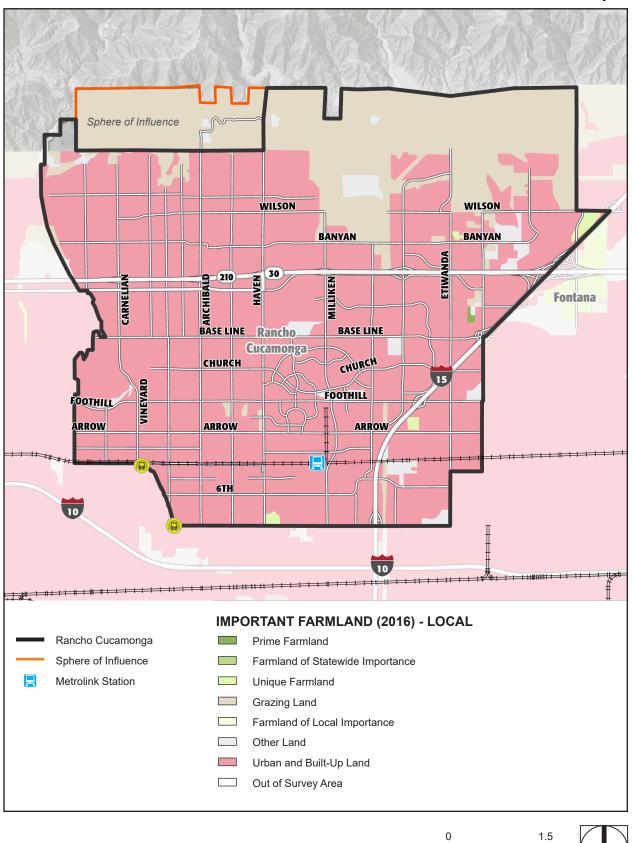
The following relevant policy of the Rancho Cucamonga General Plan Update may reduce potential impacts on agricultural and forestry resources as a result of implementation of the proposed project.

Resource Conservation Element

RC-7.8 Farmers Market, Fork to Table. Support microscale agriculture and farmers markets, and similar methods of encouraging locally grown and consumed produce.

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Figure 5.2-1 - Agricultural Lands 5. Environmental Analysis



Source: City of Rancho Cucamonga, 2020; ESRI, 2021

Scale (Miles)

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5.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.2-1: The proposed project would convert Farmland to nonagricultural uses, but would not result in the conversion of forest land to nonforest uses. [Thresholds AG-1 and AG-5]

Though Rancho Cucamonga is largely developed, pockets of agricultural land remain, predominantly in the form of vineyards and orchards that are remnants from the city's agricultural heritage. Of the total 7,352 acres of farmland in the Plan Area (City of Rancho Cucamonga and SOI), approximately 13.37 acres are designated Prime Farmland, 125.12 acres are Unique Farmland, and 0.06 acres are Farmland of Statewide Importance.

The proposed Land Use Plan does not include an agricultural designation. The 3,796.14 acres with a Rural Open Space designation in the proposed Land Use Plan would allow for existing conventional agricultural uses to continue. However, the City expects that all conventional agriculture would eventually be developed according to the land use designation of each parcel. Although unconventional agriculture would continue to be operational (e.g. indoor growing, community plots, etc.), no agricultural lands designated by the FMMP as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance would be preserved under the General Plan Update. Therefore, the proposed project would convert approximately 7,352 acres of agricultural land to nonagricultural uses, including 13.37 acres of Prime Farmland that would continue to be designated Low Density Residential and Very Low Density Residential.

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

Since the existing vineyards are small, scattered operations that do not support any largerscale agricultural uses, and since they represent less than 1 percent of the total Important Farmland in the county, their conversion to urban land uses would not have a major impact on the county's crop value.

Future development associated with buildout of the proposed General Plan Update Land Use Plan could result in the conversion of these farmland areas to nonagricultural uses, a significant impact. Preservation of off-site agricultural land is not feasible due to the developed nature of the city and the region. Preserved land would likely be in a developed portion of a city surrounded by urban uses and could be subject to nuisance complaints and development pressure. Therefore, there are no feasible mitigation measures to address this impact under the proposed land use plan, and impacts would be significant and unavoidable.

Grazing lands include scattered undeveloped lands in the city and the foothills of the San Gabriel Mountains. The loss of small, scattered undeveloped lands for grazing would not adversely affect Farmlands, nor would it result in a significant impact related to the conversion to nonagricultural uses. Additionally, the Plan Area does not include lands that qualify as forest land of timberland. Therefore, no impacts would occur related to the loss or conversion of forest land to a nonforest use.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.2-1 would be potentially significant.

Mitigation Measures

There are no feasible mitigation measures.

Level of Significance After Mitigation: Impact 5.2-1 would be significant and unavoidable.

Impact 5.2-2: The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. [Threshold AG-2]

According to the proposed Land Use Plan, the lots that are currently vineyards and orchards would be converted into urban uses as part of future, anticipated development.

The City does not have an agricultural land use designation in its existing land use plan or the proposed Land Use Plan. The Development Code also does not have an agricultural zone, although agricultural uses are allowed as an interim use on lots 2.5 acres or more iin the Residential Development Districts. Therefore, because the City has no zoning for agricultural use, no impact would occur.

There are no lands in the city under a Williamson Act contract, and no impacts related to Williamson Act contracts would occur.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.2-2 would not be significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.2-2 would not be significant.

Impact 5.2-3: The proposed project would not conflict with zoning for forest land or timberlands, and would not result in the loss of forest land. [Thresholds AG-3 and AG-4]

There are no lands that qualify as forest land or timberland. Therefore, no impacts would occur related to the loss or conversion of forest land to a nonforest use. There are also no areas within the Plan Area that are zoned as forest land, timberland, or Timberland Production. Therefore, no impacts would occur.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.2-3 would not be significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.2-3 would not be significant.

5.2.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts to agricultural resources is San Bernardino County. Future development in t Rancho Cucamonga and the rest of the county is expected to lead to a cumulative decrease in Important Farmland acreage and crop production value over time, as has been experienced by the county since 1980. The decreasing area of Important Farmland and agricultural crop production value is considered a significant adverse impact, and the contribution to a cumulative impact due to the conversion of vineyards and orchards in the City of Rancho Cucamonga represents a significant and unavoidable, cumulative impact.

5.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.2-2 and 5.2-3.

Without mitigation, these impacts would be **potentially significant**:

- Impact 5.2-1 The proposed project would result in the loss of Important Farmland in the city.
- **Cumulative** The proposed project could contribute to cumulative impacts to agriculture and forestry resources.

5.2.7 MITIGATION MEASURES

Impact 5.2-1

There are no feasible mitigation measures to address this impact under the proposed land use plan, and impacts would be significant and unavoidable.

5.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because there are no feasible mitigation measures to address the permanent loss of Important Farmland in the city, impacts would be significant and unavoidable.

5.2.9 REFERENCES

Rancho Cucamonga, City of. 2010 General Plan Draft Environmental Impact Report. https://www.cityofrc.us/sites/default/files/2021-04/Draft%20General%20Plan%20EIR.pdf.

5.3 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the City of Rancho Cucamonga General Plan Update to impact air quality. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (South Coast AQMD).

Chapter Overview

Individual projects may require project-specific mitigation measures to ensure compliance with regulations governing air quality. Because the extent of construction activities is unknown at this time—the number of construction projects occurring at once, the ability of individual projects to mitigate their impacts, residents' individual choices, City mandates, etc.—impacts are conservatively considered significant and unavoidable.

Heart of the Matter

Air quality is such a significant issue in the State of California, and specifically in Southern California, that regulations intended to improve air quality and the health of all Californians have been in place for several decades at the statewide and regional levels. Impacts are not confined to one specific city, or project and occur on a regional scale. Reliance on project-specific mitigation measures and best management practices implemented during construction and operational activities as well as compliance with regulations and the proposed General Plan policies can reduce air quality impacts in the Plan Area (City of Rancho Cucamonga and SOI).

Terminology

The following are definitions for terms and abbreviations used throughout this section.

- **AAQS:** ambient air quality standards
- ADT: average daily trips
- Concentrations: Refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million, parts per billion, or micrograms per cubic meter.
- **Criteria Air Pollutants:** Air pollutants specifically identified for control under the Federal Clean Air Act. There are currently six: carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone, and particulates.
- **DPM:** diesel particulate matter.
- **Emissions:** Refers to the actual quantity of pollutant, measured in pounds per day or tons per year.
- **ppm:** parts per million.
- Sensitive receptor: Land uses that are considered more sensitive to air pollution than others due to the types of population groups or activities involved. These land uses include residential, retirement facilities, hospitals, and schools.
- **TAC:** toxic air contaminant.
- **μg/m³:** micrograms per cubic meter.
- VMT: vehicle miles traveled.

5.3.1 ENVIRONMENTAL SETTING

5.3.1.1 Regulatory Background

AAQS have been adopted at the state and federal levels for criteria air pollutants. In addition, both the state and federal government regulate the release of TACs. Land uses in Rancho Cucamonga and its sphere of influence (SOI) are subject to the rules and regulations imposed by the South Coast AQMD, the California AAQS adopted by the California Air Resources Board (CARB), and National AAQS adopted by the US Environmental Protection Agency (EPA). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized in this section.

Federal and State Regulations

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or include other pollutants. The California Clean Air Act, signed in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS 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 "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 California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.3-1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants are ozone (O_3) , nitrogen dioxide (NO_2) , carbon monoxide (CO), sulfur dioxide (SO_2) , coarse inhalable particulate matter (PM_{10}) , fine inhalable particulate matter $(PM_{2.5})$, and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Table 5.3-1	Ambient Air Quality Standards for Criteria Pollutants
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Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources	
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.	
	8 hours	0.070 ppm	0.070 ppm	Motor verneies, paints, coatings, and solvents.	
Carbon Monoxide	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-	
(CO)	8 hours	9.0 ppm	9 ppm	powered motor vehicles.	
Nitrogen Dioxide	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations,	
(NO ₂)	1 hour	0.18 ppm	0.100 ppm	industrial sources, aircraft, ships, and railroads.	
	Annual Arithmetic Mean	*	0.030 ppm		
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm	0.075 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.	
	24 hours	0.04 ppm	0.14 ppm ²		
Respirable Coarse	Annual Arithmetic Mean	20 µg/m³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion,	
Particulate Matter (PM ₁₀)	24 hours	50 µg/m³	150 μg/m³	atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).	
Respirable Fine Particulate	Annual Arithmetic Mean	12 µg/m³	12 µg/m³	Dust and fume-producing construction, industrial, and agricultural operations, combustion,	
Matter (PM _{2.5}) ⁴	24 hours	*	35 µg/m³	atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).	
	30-Day Average	1.5 μg/m³	*	Present source: lead smelters, battery manufacturing	
Lead (Pb)	Calendar Quarter	*	1.5 μg/m³	and recycling facilities. Past source: combustion of leaded gasoline.	
	Rolling 3-Month Average	*	0.15 μg/m³		

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Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Sulfates (SO₄)⁵	24 hours	25 μg/m³	*	Industrial processes.
Visibility Reducing Particle	8 hours	ExCo =0.23/km visibility of 10≥ miles	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	*	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California AAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m₃ is equal to or less than one. For PM_{2.5}, the 24hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

³ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μg/m₃ to 12.0 μg/m₃. The existing national 24-hour PM_{2.5} standards (primary and secondary) were maintained at 35 μg/m₃, as was the annual secondary standard of 15 μg/m₃. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μg/m₃ also were maintained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

⁵ On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavely Efficiency Standards. Pavely I is a clean-car standard that reduces greenhouse gas (GHG) emissions from new passenger vehicles (light-duty auto mediumduty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavely II) for model years 2017 through 2025.
- Heavy-Duty (Tractor-Trailer) GHG Regulation. The tractors and trailers subject to this regulation must either use EPA SmartWay-certified tractors and trailers or retrofit their existing fleet with SmartWay-verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low-rolling-resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay-verified low-rolling-resistance tires. There are also requirements for trailers to have low-rolling-resistance tires and aerodynamic devices.
- SB 1078 and SB 107: Renewable Portfolio Standards. A major component of California's Renewable Energy Program is the renewables portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010.
- California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards. The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601—1608) were adopted by the California Energy Commission (CEC) on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.
- 24 CCR, Part 6: Building and Energy Efficiency Standards. Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977.
- 24 CCR, Part 11: Green Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.¹

Tanner Air Toxics Act and Air Toxics "Hot Spot" Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and to reduce exposure to them. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (17 CCR § 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 U.S. Code § 7412[b]) is a toxic air contaminant. Under state law, the California EPA, acting through CARB,

¹ The green building standards became mandatory in the 2010 edition of the code.

is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

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

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, must communicate the results to the public through notices and public meetings.

CARB has the following specific rules to limit TAC emissions:

- I3 CCR Chapter 10 § 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.
- I3 CCR Chapter 10 § 2480: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools. Generally restricts a school bus or transit bus from idling for more than five minutes when within 100 feet of a school.
- I3 CCR § 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate. Regulations established to control emissions associated with diesel-powered TRUs.

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM₂₅), and lead (Pb) are primary air pollutants. Of these, CO, SO₂, NO₂, PM₁₀, and PM₂₅ are "criteria air pollutants," which means that AAQS have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and nitrogen dioxide (NO₂) are the principal secondary pollutants. Each of the primary and secondary criteria air pollutants and its known health effects are described below and summarized in Table 5.3-2, *Criteria Air Pollutant Health Effects Summary*.

Pollutant	Health Effects	Examples of Sources	
Carbon Monoxide (CO)	 Chest pain in heart patients Headaches, nausea Reduced mental alertness Death at very high levels 	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves	
Ozone (O ₃)	 Cough, chest tightness Difficulty taking a deep breath Worsened asthma symptoms Lung inflammation 	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	
Nitrogen Dioxide (NO2)	Increased response to allergensAggravation of respiratory illness	Same as carbon monoxide sources	
Particulate Matter (PM ₁₀ & PM _{2.5})	 Hospitalizations for worsened heart diseases Emergency room visits for asthma Premature death 	 Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction 	
Sulfur Dioxide (SO ₂)	 Aggravation of respiratory disease (e.g., asthma and emphysema) Reduced lung function 	Combustion of sulfur- containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes	
Lead (Pb)	 Behavioral and learning disabilities in children Nervous system impairment 	Contaminated soil	

Table 5.3-2	Criteria Air Pollutant Health Effects Summary
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Source: CARB 2009; South Coast AQMD 2005.

Carbon Monoxide is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2018). The South Coast Air Basin (SoCAB) is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2017b).

Nitrogen Oxides are a by-product of fuel combustion and contribute to the formation of ground-level O3, PM10, and PM25. The two major forms of NOx are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NOx produced by combustion is NO, but NO reacts quickly with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO2 is only potentially irritating. NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO₂ exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO₂ concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2018). Secondary effects of NOx include nitrogen deposition effects on plants. Nitrogen deposition effects on plants can have a range of effects on terrestrial and aquatic ecosystems, including increased plant growth, decreased plant biodiversity, soil acidification, increased invasive species, increased damages from pests and frost, and elevated nitrogen pollution to surface waters impacting aquatic biota (EPA 2019a). The SoCAB is designated an attainment area for NO₂ under the National and California AAQS (CARB 2017b).

Sulfur Dioxide is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO₂. When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO₂, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2018). The SoCAB is designated attainment under the California and National AAQS (CARB 2017b).

Suspended Particulate Matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM₁₀, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., \leq 10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or PM₂₅, have an aerodynamic diameter of 2.5 microns or less (i.e., \leq 2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM₁₀ and PM₂₅ may adversely

affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that PM2.5, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., \leq 0.1 millionths of a meter or <0.000004 inch), have human health implications, because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA or CARB has yet to adopt AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,² environmental damage,³ and aesthetic damage⁴ (South Coast AQMD 2005; USEPA 2018). The SoCAB is a nonattainment area for PM_{2.5} under California and National AAQS and a nonattainment area for PM₁₀ under the California AAQS (CARB 2017b).5

Ozone, or O₃, is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2018). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2017b).

Volatile Organic Compounds are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS

 $^{^2~}$ PM_{25} is the main cause of reduced visibility (haze) in parts of the United States.

³ Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

⁴ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

⁵ CARB approved the South Coast AQMD's request to redesignate the South Coast Air Basin (SoCAB) from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

for VOCs, meaning that no health-based criteria established by the EPA or CARB. However, because they contribute to the formation of O₃, South Coast AQMD has established a significance threshold. The health effects for ozone, which VOC contributes to the formation of, are described above.

Lead is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards. Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; and Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012). As a result of the abovenoted violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2017b). There are no leademitting sources associated with this project, and therefore, lead is not a pollutant of concern for the proposed project.

Toxic Air Contaminants

People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory and other health problems (USEPA 2019b). By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most relevant to the project being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory systems and may exacerbate existing allergies and asthma systems (USEPA 2002).

Community Risk

To reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when siting sensitive receptors near existing pollution sources. CARB's recommendations were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity substantially increases exposure and the potential for adverse health effects. Three carcinogenic TACs constitute the majority of the known health risks from motor vehicle traffic—DPM from trucks and benzene and 1,3 butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

In 2017, CARB provided a supplement to the *Air Quality and Land Use Handbook* for nearroadway air pollution exposure, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory* (CARB 2017a). Strategies to reduce exposure include practices and technologies that reduce traffic emissions, increase dispersion of traffic pollution (or the dilution of pollution in the air), or remove pollution from the air.

Regional Regulations

The state is divided into air pollution control districts/air quality management districts. These agencies are county or regional governing authorities that have primary responsibility for controlling air pollution from stationary sources. CARB and local air districts are also responsible for developing clean air plans to demonstrate how and when California will attain AAQS established under both the federal and California Clean Air Acts. For the areas within California that have not attained air quality standards, CARB works with air districts to develop and implement state and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. The SoCAB is managed by South Coast AQMD.

South Coast AQMD Air Quality Management Planning

The South Coast AQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. This area of 10,743 square miles is home to over 16.8 million people—about half the population of the whole state of California. It is the second most populated urban area in the United States and one of the smoggiest. The South Coast AQMD operates 37 permanent monitoring stations and 5 single-pollutant source impact lead (Pb) air monitoring sites in the SoCAB and a portion of the Salton Sea Air Basin in Coachella Valley (South Coast AQMD 2019a).

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. It is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, South Coast AQMD adopted the 2016 AQMP, an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 eight-hour ozone standard by 2031
- 2012 annual PM2.5 standard by 20257
- 2006 24-hour PM2.5 standard by 2019
- 1997 8-hour ozone standard by 2023
- 1979 1-hour ozone standard by year 2022

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (South Coast AQMD 2017), which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent more reductions than existing regulations for the 2023 ozone standard and 55 percent more reductions than existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce $PM_{2.5}$ concentrations in the SoCAB. However, because the goal is to meet the 2012 federal annual $PM_{2.5}$ standard no later than year 2025, South Coast AQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under this federal standard. A "moderate" nonattainment requires meeting the 2012 federal standard by no later than 2021.

The 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. The 2016 AQMP includes 15 measures to reduce mobile source

⁷ The 2016 AQMP requests a reclassification from moderate to serious nonattainment for the 2012 National PM_{2.5} standard.

emissions. These measures include identifying actions to mitigate and reduce emissions associated with new development and redevelopment projects, to reduce facility-based (i.e., commercial marine ports, rail yards and intermodal facilities, warehouse and distribution centers, and commercial airports in addition to new and redevelopment projects), on-road, and off-road mobile sources of emissions, and also to identify the benefits of incentive programs in reducing emissions. The South Coast AQMD has established working groups to plan and implement the facility-based mobile source measures. Currently, South Coast AQMD is reviewing the feasibility of implementation of an indirect source review program to reduce emissions from new development of commercial, residential, and industrial projects that do not fall within the other facility-based mobile source measures (South Coast AQMD 2019b). Additionally, South Coast AQMD is also reviewing a program to facilitate local and regional emission reductions through actions and investments at warehouses (South Coast AQMD 2019c). Overall, strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

Lead State Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead classification due to source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

South Coast AQMD Rules and Regulations

All projects are subject to South Coast AQMD rules and regulations in effect at the time of activity, including:

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- Rule 402, Nuisance. This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- Rule 403, Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities.
- Rule 445, Wood Burning Devices. This rule is intended to reduce the emission of particulate matter from wood-burning devices and applies to manufacturers and sellers of wood-burning devices, commercial sellers of firewood, and property owners and tenants that operates a wood-burning device.
- Rule 1113, Architectural Coatings. This rule limits the VOC content of architectural coatings used on projects in the South Coast AQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the South Coast AQMD must comply with the current VOC standards set in this rule.
- Rule 1403, Asbestos Emissions from Demolition/Renovation Activities. The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.
- Rule 2305, Warehouse Indirect Source Rule: Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and accompanying Rule 316, Fees for Rule 2305. The purpose of these rules is to reduce local and regional emissions of nitrogen oxides and PM, and to facilitate local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses in order to assist in meeting state and federal air quality standards for ozone and fine particulate matter. The rules apply to owners and operators of existing and new warehouses in South Coast AQMD's jurisdiction with 100,000 square feet or more of indoor floor space in a single building. Rule 2305 requires warehouses subject to the rule to annually take actions that reduce emissions regionally and locally or that facilitate emissions reductions. More specifically, Rule 2305 requires operators of warehouses subject to the rule to earn a certain number of points each year from emissions-reducing activities or payment of a mitigation fee. Emissions reduction actions are assigned a specified number of points based on a menu. Rule 2305 applies to existing and new warehouse uses that meet the size criterion in the city. Emissions reduction actions are complementary to the goals and policies of the City's General Plan Update.

Standard Conditions of Approval

There are existing regulations that reduce air quality impacts. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential air quality impacts in the city. Existing regulations that reduce air quality impacts include the standard conditions listed here.

5.3-1: The City shall ensure that discretionary development will incorporate best management practices (BMPs) to reduce emissions to be less than applicable thresholds. These BMPs include but are not limited to the most recent South Coast AQMD recommendations for construction BMPs (per South Coast AQMD's CEQA Air Quality Handbook, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 AQMP, and SCAG's Mitigation Monitoring and Reporting Plan for the 2020-2045 RTP/SCS, or as otherwise identified by South Coast AQMD).

5.3-2: Applicants for future discretionary development projects that would generate construction-related emissions that exceed applicable thresholds, will include, but are not limited to, the mitigation measures recommended by South Coast AQMD (in its CEQA Air Quality Handbook or otherwise), to the extent feasible and applicable to the project. The types of measures shall include but are not limited to: maintaining equipment per manufacturer specifications; lengthening construction duration to minimize number of vehicle and equipment operating at the same time; requiring use of construction equipment rated by the EPA as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emissions limits, applicable for engines between 50 and 750 horsepower; and using electricpowered or other alternative-fueled equipment in place of diesel-powered equipment (whenever feasible). Tier 3 equipment can achieve average emissions reductions of 57 percent for NO_x, 84 percent for VOC, and 50 percent for particulate matter compared to Tier 1 equipment. Tier 4 equipment can achieve average emissions reductions of 71 percent for NO_x, 86 percent for VOC, and 96 percent for particulate matter compared to Tier 1 equipment.

- **5.3-3**: The City shall ensure that discretionary development that will generate fugitive dust emissions during construction activities will, to the extent feasible, incorporate BMPs that exceed South Coast AQMD's Rule 403 requirements to reduce emissions to be less than applicable thresholds.
- **5.3-4**: Applicants for future discretionary development projects which will generate construction-related fugitive dust emissions that exceed applicable thresholds will include, but are not limited to, the mitigation measures recommended by South Coast AQMD's CEQA Air Quality Handbook, to the extent feasible and applicable:
 - The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excess amounts of dust.
 - Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of watering (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. This measure can achieve PM₁₀ reductions of 61 percent through application of water every three hours to disturbed areas.
 - Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:

- All trucks shall be required to cover their loads as required by California Vehicle Section 23114. Covering loads and maintaining a freeboard height of 12 inches can reduce PM₁₀ emissions by 91 percent.
- All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. Application of water every three hours to disturbed areas can reduce PM₁₀ emissions by 61 percent.
- Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust. Replacement of ground cover in disturbed areas can reduce PM₁₀ emissions by 5 percent.
- Signs shall be posted on-site limiting traffic to 15 miles per hour or less. This
 measure can reduce associated PM₁₀ emissions by 57 percent.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth-moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard offsite or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with South Coast AQMD when winds are excessive.
- Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

5.3.1.2 Existing Conditions

Climate, Meteorology, Topography

Rancho Cucamonga and its SOI are in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills; it is bounded by the Pacific Ocean in the southwest quadrant, and high mountains form the remainder of the perimeter.

An inversion is a layer of warmer air over a layer of cooler air. Inversions affect air quality conditions significantly because they influence the mixing depth (i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground). The highest air pollutant concentrations in the SoCAB generally occur during inversions, two of which occur regularly.

Subsidence inversions are are prevalent in the summer and fall months. They are formed in valleys, such as the San Bernardino Valley, as lower altitude air increases in temperature, is compacted against surrounding mountains, and becomes trapped under a layer of cooler air. The frequency of this type of elevated temperature inversion caps the mixing height, limiting the volume of air available for dilution of pollutants.

The inversions typical of winter, called radiation inversions, are formed as heat quickly radiates from the earth's surface after sunset, causing the air in contact with it to rapidly cool. Radiation inversions are strongest on clear, low-wind, cold winter nights, allowing the buildup of such pollutants as CO and particulate matter. When wind speeds are low, there is little mechanical turbulence to mix the air, resulting in a layer of warm air over a layer of cooler air next to the ground. Mixing heights under these conditions can be as low as 50 to 100 meters, particularly in rural areas.

Urban areas usually have higher minimum mixing heights because of heat island effects and increased surface roughness. During radiation inversions, downwind transport is slow, the mixing heights are low, and turbulence is minimal, all factors that contribute to ozone formation. Although each type of inversion is most common during a specific season, either one can occur at any time of the year. Sometimes, both occur simultaneously. Moreover, the characteristics of an inversion often change throughout the course of a day as atmospheric temperatures change.

Attainment Designations

Air pollutant emissions generally are highest in areas that have population densities and high motor vehicle use and/or industrialization. Contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals.

Criteria air pollutant concentrations are measured at several monitoring stations in the SoCAB and are used by EPA and CARB to designate attainment status for criteria pollutants. The current attainment designations for San Bernardino County are shown in Table 5.3-3, *Attainment Status Designations for San Bernardino County*. For ozone, the EPA classifies areas of nonattainment in order of greatest to lesser exceedance, as "extreme," "severe,"

"serious," "moderate," or "marginal." These designations indicate the degree to which an area exceeds the standards as well as the amount of time allowed to demonstrate attainment, with the time allowed correlated with the difficulty of the challenge involved.

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard	
	Attainment (1-hour) ¹	Nonattainment (1-hour) classification	
Ozone	Nonattainment (8-hour) ³ classification = extreme		
	Nonattainment (8-hour) ⁴ classification = extreme	Nonattainment (8-hour)	
	Nonattainment (8-hour) ⁵ classification = extreme		
Respirable Particulate	Attainment (2(haux)	Nonattainment (24-hour)	
Matter (PM10)	Attainment (24-hour)	Nonattainment (annual)	
Fine Particulate Matter	Nonattainment (24-hour)	No state standard for 24- hour	
(PM _{2.5})	Nonattainment (annual)	Nonattainment (annual)	
Carbon monoxide (CO)	Attainment (1-hour)	Attainment (1-hour)	
Carbon monoxide (CO)	Attainment (8-hour)	Attainment (8-hour)	
Nitrogen dioxide (NO ₂)	Unclassified/attainment (1- hour)	Attainment (1-hour)	
Nitrogen dioxide (NO ₂)	Unclassified/attainment (annual)	Attainment (annual)	
Sulfur dioxido (SO)6	Attainment (1 hour)	Attainment (1-hour)	
Sulfur dioxide (SO ₂) ⁶	Attainment (1-hour)	Attainment (24-hour)	
Lead (particulate)	Attainment (3-month rolling average)	Attainment (30-day average)	
Hydrogen sulfide		Unclassified (1-hour)	
Sulfates	No federal standard	Attainment (24-hour)	
Visibility-reducing particles		Unclassified (8-hour)	
Vinyl chloride		Unclassified (24-hour)	

 Table 5.3-3
 Attainment Status Designations for San Bernardino County

Source: South Coast AQMD 2016.

¹ Air quality meets federal 1-hour ozone standard (77 Federal Register 64036). The U.S. Environmental Protection Agency revoked this standard, but some associated requirements still apply.

² Per Health and Safety Code Section 40921.5(c), the classification is based on 1989-1991 data and therefore does not change.

³ 1997 standard.

⁴ 2008 standard.

⁵ 2015 standard.

⁶ 2010 standard.

County Emissions Inventory

CARB provides projected estimates for San Bernardino county's 2020 emissions inventory for use in SIP planning. While these source type percentages are only available at the county level (separate inventory data are available for the portion of San Bernardino County in the SoCAB), the specific breakdown of source categories is representative of the diversity of source types contributing to airborne emissions in Rancho Cucamonga. Therefore, these are the best available data for identifying the dominant sources of PM and ozone precursors in the city, as well as estimating the percentage of emissions resulting from each source category.

According to the 2020 projected emissions inventory data for San Bernardino County (SoCAB portion) from CARB, mobile sources (e.g., passenger vehicles and medium- and heavy-duty trucks) are the largest contributor to the air pollutant levels of VOCs and NO_x, accounting for approximately 42 percent and 84 percent, respectively, of the total mass emissions. Areawide sources (e.g., asphalt paving and roofing, farming operations) account for approximately 75 percent and mobile sources account for 14 percent of the county's PM₁₀ emissions. Stationary sources (e.g., manufacturing and industrial processes, landfills) account for 22 percent of the county's PM₂₅ emissions, and 56 percent are due to areawide sources (CARB 2017c).

Monitoring Station Data

South Coast AQMD and CARB operate a regional monitoring network of monitoring stations that measure the ambient concentrations of the six criteria air pollutants in the South Coast AQMD. Data from two of the monitoring stations nearest Rancho Cucamonga are presented in Table 5.3-4, *Annual Air Quality Data, Fontana-Arrow Highway Station (2016–2018)*, and Table 5.3-5, *Annual Air Quality Data, Upland Station (2016–2018)*. These tables show the most recent three-year summaries of ambient air quality data from the Fontana-Arrow Highway station, just east of the city (near the intersection of Almond Avenue and Arrow Route), and the Upland monitoring station on the western boundary of the city (near the intersection of Grove Avenue and Foothill Boulevard), for ozone, PM_{2.5}, and PM₁₀, the main pollutants of concern in San Bernardino County. As can be seen, ambient concentrations of ozone exceed both the national and state standards approximately 30 to 90 days per year, while ambient PM₁₀ and PM_{2.5} concentrations exceed the standards less than five days per year on average.

Ozone	2016	2017	2018
Maximum concentration (1-hr/8-hr, ppm)	0.139/0.105	0.137/0.119	0.141/0.111
Days state standard exceeded (1-hr/8-hr)	34/52	33/51	38/72
Days national standard exceeded (8-hr)	49	49	69
Respirable Particulate Matter (PM10)	2016	2017	2018
Maximum concentration (µg/m³)	94.8	75.3	61.5
Days state standard exceeded (measured ¹)	*	*	*
Days national standard exceeded (measured ¹)	0	*	0
Fine Particulate Matter (PM _{2.5})	2016	2017	2018
Maximum concentration (µg/m³)	58.8	39.2	29.2
Annual average (µg/m³)	*	12.9	10.1
Days national standard exceeded (measured ¹)	3	3	0

Table 5.3-4 Annual Air Quality Data, Fontana-Arrow Highway Station (2016–2018)

Source: CARB 2019a.

¹ Measured days are those days that an actual measurement was greater than the level of the state daily standard or national daily standard. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Table 5.3-5	Annual Air Quality Data, Upload Station (2016–2018)	
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Ozone	2016	2017	2018
Maximum concentration (1-hr/8-hr, ppm)	0.156/0.116	0.150/0.128	0.133/0.112
Days state standard exceeded (1-hr/8-hr)	53/89	66/89	25/54
Days national standard exceeded (8-hr)	88	87	52
Respirable Particulate Matter (PM10)	2016	2017	2018
Maximum concentration (µg/m³)	184.0	106.5	156.6
Days state standard exceeded (measured ¹)	*	*	*
Days national standard exceeded (measured ¹)	1	0	*
Fine Particulate Matter (PM _{2.5})	2016	2017	2018
Maximum concentration (µg/m³)	44.9	53.2	47.9
Annual average (µg/m³)	17.6	*	*
Days national standard exceeded (measured ¹)	*	*	*

Source: CARB 2019a.

¹ Measured days are those days that an actual measurement was greater than the level of the state daily standard or national daily standard. The number of days above the standard is not necessarily the number of violations of the standard for the year.

The purpose of these designations is to identify areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." "Unclassified" is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards.

Stationary Sources

Large stationary sources of emissions (more than 10 tons of one or more criteria air pollutants per year) are more comprehensively regulated than mobile sources and can sometimes be subject to requirements for additional mitigation. Rancho Cucamonga has six large stationary sources that are on CARB's inventory of stationary source facilities in the state (CARB 2019b). Annual NO_x, VOC, PM₁₀, and PM₂₅ emissions data for these facilities from 2017, the most recent year which they are available, are presented in Table 5.3-6, *Large Stationary Sources Emissions Inventory (2017)*. Based on the results in Table 5.3-6, these emitters of substantial quantities of PM and ozone precursors are monitored closely by South Coast AQMD to ensure compliance with permit limits as the SoCAB steadily progresses toward attainment with the national and state AAQS. To demonstrate compliance with permit requirements, stationary sources are required to undergo periodic source testing and submit to South Coast AQMD a source test report summarizing the results.

Facility	NO _x (ton)	PM ₁₀ (ton)	PM _{2.5} (ton)	VOC (ton)
Frito Lay	11.6	11.3	10	2.5
Mission Foods Corporation	8.7	2.1	1.5	38.2
Nongshim America, Inc.	1.6	3.0	2.5	1.9
Southern California Edison (SCE) Grapeland Hybrid Facility	1.3	1.3	1.3	0.4
Steelscape Inc.	24.1	1.4	1.4	5.8
CMC Steel	108	51.9	37.8	17.4

Table 5.3-6 Large Stationary Sources, Emissions Inventory (2017)

Source: CARB 2019b

Mobile Sources

Several large roadways, including I-15, SR-210, and Foothill Boulevard, traverse the city, and I-10 passes less than a mile south of the city boundary. Mobile sources along these major roadways are one of the largest sources of criteria air pollutants and ozone precursors (VOC and NOx) in the city and significantly contribute to the degradation of air quality. From a land use planning perspective, high-volume roadways are a concern because they are often the primary source of TACs in an urban setting. CARB defines a high-volume road as an urban road with 100,000 or more vehicle trips per day or a rural road with 50,000 or more vehicle trips per day (CARB 2005).

According to the California Department of Transportation, for the year 2018, the most recent year for which data are available, the following roadways had an annual average daily traffic (AADT) volume of more than 100,000 (Caltrans 2018):

- I-15 at the junction with the I-10 (210,000 AADT)
- I-15 at the junction with Base Line Road (160,000 AADT)
- I-15 at Miller Avenue (180,000 AADT)
- SR-210 at the junction with Haven Avenue (200,000 AADT)

Toxic Air Contaminants

Two stationary sources in the city have been identified as sources of TACs in South Coast AQMD's 2018 Annual Report on AB 2588 Air Toxics Hot Spots Program (South Coast AQMD 2019d). One of the main goals of AB 2588 is to provide the public with information regarding potential health effects from toxic air contaminants emitted from existing permitted facilities, and to develop plans to reduce associated risks.

Cancer and noncancer health risks are identified for each facility, as determined by a quantitative health risk assessment (HRA), which considers both the toxicity of individual TACs and the dispersion pattern around the facility based on specific source parameters as well as local geographical and meteorological conditions. Cancer risk is the increased number of cancer cases per million people when exposed over an average lifetime of 70 years. Noncancer risks indicate the likelihood of experiencing other adverse health effects due to acute (short-term) or chronic (long-term) exposures. Noncancer risk is presented in terms of a hazard index, which is the ratio of the exposure due to source emissions to the baseline reference exposure level. Health risks for existing AB 2588 facilities in Rancho Cucamonga are presented in Table 5.3-7, *AB 2588 Hot Spot Facilities Health Risks*.

Table 5.3-7	AB 2588 Hot Spot Facilities Health Risks
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Facility	Cancer Risk (per million)	Noncancer Acute Hazard Index	Noncancer Acute Chronic Hazard Index	HRA Approval Year
Schlosser Forge Co./Arconic	9.5	1.6	1.1	2002
Tamco	8.7	0.49	0.61	2015

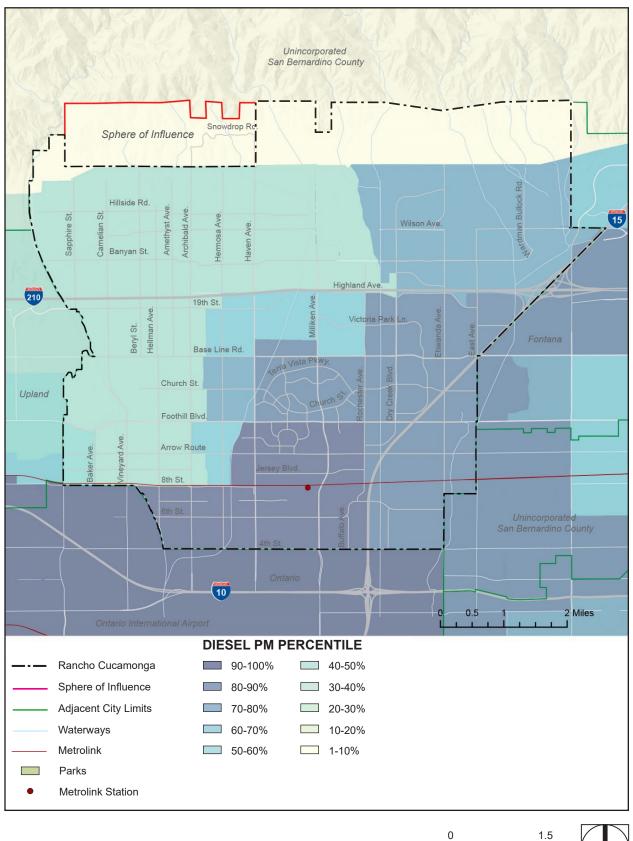
Source: South Coast AQMD 2020.

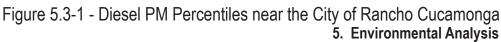
Note: HRA = Health Risk Assessment

CAlEnviroScreen 3.0

CalEnviroScreen is a mapping tool developed by the Office of Environmental Health Hazard Assessment to help identify low-income census tracts in California that are disproportionately burdened by and vulnerable to multiple sources of pollution. CalEnviroScreen uses environmental, health, and socioeconomic information based on data sets available from state and federal government sources to produce scores for every census tract in the state. Scores are generated using 20 statewide indicators, which fall into four categories: exposures, environmental effects, sensitive populations, and socioeconomic factors. The composite CalEnviroScreen 3.0 score incorporates several indicators, including criteria air pollutant concentration, frequency of adverse health impacts, and traffic density, for each census tract in the city, as shown in Figure 5.3-1, *Diesel PM Percentiles near the City of Rancho Cucamonga*, Figure 5.3-2, *PM*_{2.5} *Percentiles near the City of Rancho Cucamonga*, Figure 5.3-3, *Asthma Rate Percentiles near the City of Rancho Cucamonga*, and Figure 5.3-4, *Traffic Density Percentiles near the City of Rancho Cucamonga*.

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Source: Raimi+Associates, 2020; City of Rancho Cucamonga, 2010; SCAG, 2020; County of San Bernardino, 2020; CalEnviroScreen 3.0, 2018

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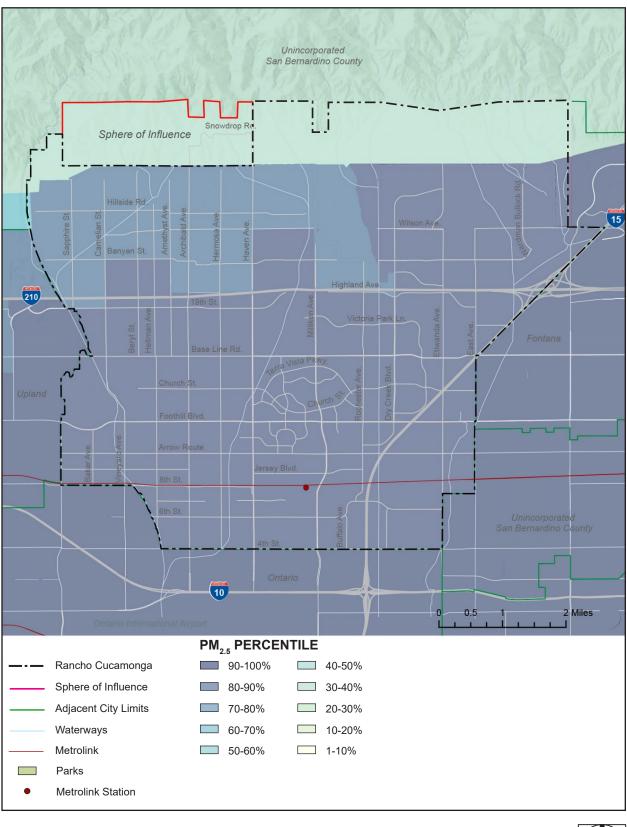


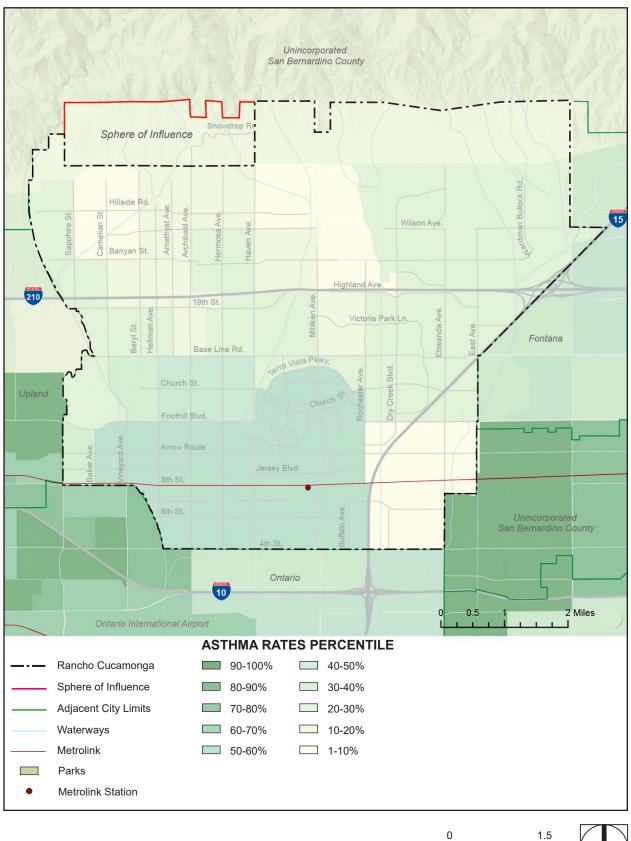
Figure 5.3-2 - PM_{2.5} Percentiles near the City of Rancho Cucamonga 5. Environmental Analysis

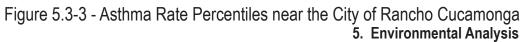
Source: Raimi+Associates, 2020; City of Rancho Cucamonga, 2010; SCAG, 2020; County of San Bernardino, 2020; CalEnviroScreen 3.0, 2018 1.5

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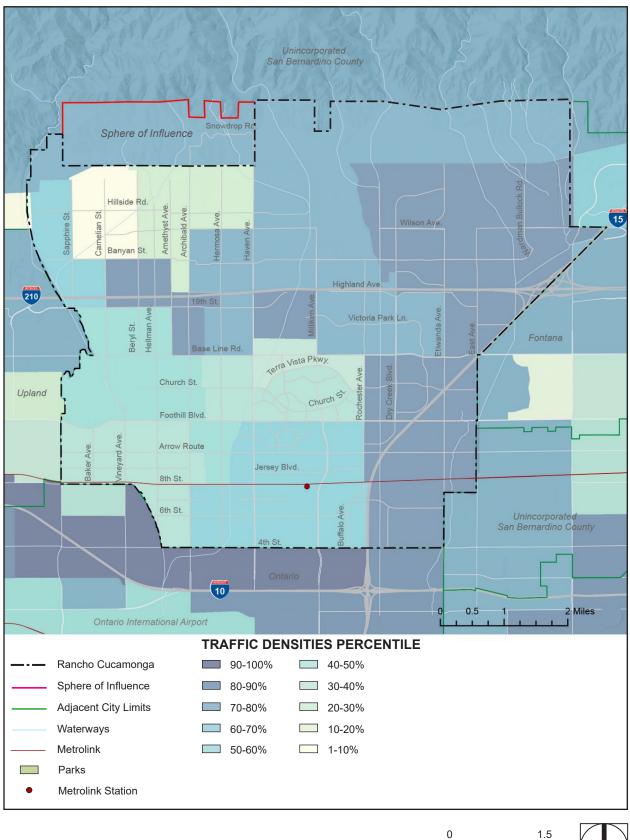


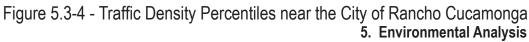


Source: Raimi+Associates, 2020; City of Rancho Cucamonga, 2010; SCAG, 2020; County of San Bernardino, 2020; CalEnviroScreen 3.0, 2018

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Source: Raimi+Associates, 2020; City of Rancho Cucamonga, 2010; SCAG, 2020; County of San Bernardino, 2020; CalEnviroScreen 3.0, 2018

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The details of the specific indicator scores are presented below:

- Ozone. The ozone percentile across all census tracts in the city is uniformly 98, meaning that the ground-level ozone concentration across Rancho Cucamonga is higher than 98 percent of all census tracts in California.
- PM_{2.5}. Generally, the PM_{2.5} percentile for census tracts in the city is 93, meaning that residents of the city are exposed to PM_{2.5} concentrations that are higher than the ambient concentrations in 93 percent of all California census tracts (Figure 5.3-1).
- Diesel PM. Generally, the diesel PM percentile for census tracts in the city ranges from 42 to 95, with an average of 60, meaning that the concentration of diesel PM in many areas of the City is, on average, higher than the ambient concentrations in 60 percent of all the census tracts in California (Figure 5.3-2).
- Asthma Rates. Generally, the asthma incidence percentile for census tracts in the city ranges from 8 to 41, with an average of 32, meaning that the incidence of asthma in the city is, on average, higher than the ambient concentrations in 32 percent of all the census tracts in California (Figure 5.3-3). Though incidence of asthma is not dramatically higher in the city than other areas of the state, it is significant that the highest incidence rates among residents are in the southwestern quadrant, where diesel PM and PM_{2.5} concentrations are higher than the rest of the city.
- Traffic Density. The traffic density percentile for census tracts in Rancho Cucamonga generally ranges from 26 to 89, with an average percentile of 60, meaning that each tract experiences a density of traffic higher than 26 to 89 percent of the census tracts in California (Figure 5.3-4). Traffic density is calculated as the volume of traffic in a census tract divided by the total length of its roads. Census tracts in the eastern portion of the city, along both sides of I-15, as well as census tracts alongside SR-210, are within the 83rd to 88th percentiles for traffic density. Tracts just south of the city, between I-10 and East 4th Street, are within the 93rd to 99th percentiles. Higher than average diesel PM emissions in these portions of the city may partially be explained by the high traffic densities in these areas. Large numbers of diesel trucks entering and exiting the freeways, particularly when idling at a backed-up on-ramp, also contribute to diesel PM emissions in these areas.

5.3.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.
- AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- AQ-3 Expose sensitive receptors to substantial pollutant concentrations.
- AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The thresholds used to determine the significance of the General Plan Update's impacts are based on South Coast AQMD's recommended air quality thresholds which include criteria to assist in the evaluation of significant impacts for individual projects. Appendix G of the State California Environmental Quality Act (CEQA) Guidelines also provides considerations for determining the significance of a project's impacts, in the form of initial study checklist questions.

CEQA-related air quality thresholds of significance are tied to achieving or maintaining attainment designations with the National and California AAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health.

In consideration of the nonattainment status of the SoCAB with respect to the AAQS, South Coast AQMD has identified numerical thresholds for project-generated emissions of ozone precursors that would determine whether a project's emissions would result in a cumulative, regional contribution (i.e., significant) to the baseline nonattainment status of the SoCAB (South Coast AQMD 2019). South Coast AQMD's quantitative thresholds of significance for project-level CEQA evaluation may be used to determine the extent to which a project's emissions of ozone precursors would contribute to regional degradation of ambient air quality in the SoCAB.

Using federal and State guidance pertaining to TACs, South Coast AQMD developed cancer risk thresholds for TAC exposure. Unlike criteria air pollutants, there is no known safe concentrations of TACs. Moreover, TAC emissions contribute to the deterioration of localized air quality because of the dispersion characteristics of TAC emissions that do not cause regional-scale air quality impacts. South Coast AQMD thresholds are designed to ensure that a source of TACs does not contribute to a localized, significant impact to existing or new receptors.

The following thresholds of significance are used to determine whether implementation of the General Plan Update would produce a significant localized and/or regional air quality impact such that human health would be adversely affected. For the purpose of this analysis, implementation of the General Plan Update would have a significant air quality impact if it would:

- Conflict with or obstruct implementation of South Coast AQMD's 2016 Air Quality Management Plan (AQMP).
- Generate construction emissions in exceedance of 100 pounds per day (lb/day) of NO_x, 75 lb/day of VOC, 150 lb/day of respirable particulate matter (PM₁₀) and oxides of sulfur (SO_x), 55 lb/day of fine particulate matter (PM_{2.5}), 550 lb/day of CO, and 3 lb/day of lead.
- Generate operational emissions in excess of 55 lb/day of NO_x and VOC, and PM_{2.5}, 150 lb/day of PM₁₀ and SO_x, 550 lb/day of CO, and 3 lb/day of lead.
- Generate long-term operational mobile-source CO emissions that would result in, or contribute to, an exceedance of the California AAQS (exceedance of 20 parts per million [ppm] over a 1-hour period or exceedance of 9 ppm over an 8-hour period) or National AAQS (exceedance of 35 ppm over a 1-hour period or exceedance of 9 ppm over an 8-hour period).
- Expose sensitive receptors to TAC concentrations that result in an incremental increase in cancer risk greater than 10 in one million and/or a noncarcinogenic hazard index of 1.0 or greater.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Projects that exceed these thresholds of significance would produce emissions that would conflict with the SoCAB's overall maintenance or attainment of the National and California AAQS for criteria air pollutants. The AAQS represent concentrations of criteria air pollutants protective of human health and are substantiated by extensive scientific evidence. The EPA and CARB recognize that ambient air quality below these concentrations would not cause adverse health impacts to exposed receptors. In connecting an air district's (i.e., South Coast AQMD) thresholds of significance to its anticipated date of attainment, projects that demonstrate levels of construction and/or operational emissions below the applicable thresholds would not result in cumulatively considerable emissions that would cause an adverse health impact related to exposure to criteria air pollutants in elevated concentrations.

Similarly, projects that demonstrate emissions levels in excess of an applicable threshold could contribute to the continued nonattainment designation of a region or potentially degrade a region from attainment to nonattainment. Resulting acute or chronic respiratory and cardiovascular illness could occur, with symptoms including coughing, difficulty breathing, chest pain, eye and throat irritation and, in extreme cases, death caused by exacerbation of existing respiratory and cardiovascular disease, cancer, and impaired immune and lung function.

Projects that generate odors would be subject to South Coast AQMD's Rule 202, "Nuisance," which stipulates that persons shall not discharge quantities of odors or other materials that could cause injury, detriment, nuisance, or annoyance to a considerable number of persons or to the public. In addition, Chapter 8.23, Nuisance Abatement, of the Rancho Cucamonga Municipal Code is intended to identify and provide a remedy for certain conditions which,

when found to exist on land within the city, are detrimental to public health, safety or welfare, or which interfere with the reasonable enjoyment of life or property, and thereby create a public nuisance. The definition of nuisance within this chapter of the code includes odors. If a public nuisance, including odors is identified, it is the duty of every owner, occupant and person in control of any property, business, operation or interest therein located within the city to remove, abate, and prevent the recurrence of a public nuisance upon such activity or interest therein. Any recurrence of a condition may be deemed a continuation of the original condition.

5.3.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant policies of the Rancho Cucamonga General Plan Update, which may contribute to the reduction of air quality pollutants as a result of implementation of the proposed project.

Land Use and Community Character Element

GOAL LC-1	CITY OF PLACES. A beautiful city with a diversity and balance of unique and well-connected places.
LC-1.1	Complete Places. Ensure that a broad range of recreational, commercial, education, and civic amenities are nearby and easily accessible to residents
	and workers in each neighborhood and each employment district.

- LC-1.3 Quality of Public Space. Require that new development incorporate the adjacent street and open space network into their design to soften the transition between private and public realm and create a greener, more human-scale experience.
- LC-1.4 Connectivity and Mobility. Work to complete a network of pedestrian- and bike-friendly streets and trails, designed in concert with adjacent land uses, using the public realm to provide more access options.
- LC-1.9 Infill Development. Enable and encourage infill development with vacant and underutilized properties through flexible design requirements and potential incentives.
- **LC-1.12** Adaptive Reuse. Support the adaptive reuse of historic properties consistent with neighborhood character.
- LC-1.13 Improved Public Realm. Require that new development extend the "walkable public realm" into previously vacant and/or parking-lot-dominant large single-use parcels of land.

- **GOAL LC-2 HUMAN SCALED.** A city planned and designed for people fostering social and economic interaction, an active and vital public realm, and high levels of public safety and comfort.
- LC-2.3 Streetscape. Enhance the pedestrian experience through streetscape improvements such as enhanced street lighting, street trees, and easement dedications to increase the widths of the sidewalks, provide side access parking lanes, and other pedestrian and access amenities.
- LC-2.4 Tree Planting. Require the planting of trees that shade the sidewalks, buffer pedestrians from traffic, define the public spaces of streets, and moderate high temperatures and wind speeds throughout the city.
- LC-2.11 Park-Once. Allow and encourage strategies that enable adjacent uses and properties to flexibly share parking facilities, so that users can park once and pursue multiple activities on foot before returning to their car, such as:
 - Unbundling parking from development.
 - Considering parking "districts" demonstrating sufficient parking within a convenient walking distance.
- **GOAL LC-4 COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- LC-4.2 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining parcels.
- LC-4.3 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well structured such that the physical layout and land use mix promote walking to services, biking and transit use, and have the following characteristics:
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.
 - Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile.
 - Require development patterns such that 60 percent of dwelling units are within one-half mile walking distance to neighborhood goods and services, such as markets, cafes, restaurants, churches, dry cleaners, laundromats, farmers markets, banks, hair care, pharmacies, and similar uses.
 - Access to goods and services within a safe, comfortable walking distance.

- Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context.
- Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.8 Solar Orientation. Street, block, and lot layouts should orient a majority of lots within 20 degrees of a north-south orientation for increased energy conservation.
- LC-4.11 Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building and housing types, and lack of walking or biking access to parks, schools, goods, and services.
- **GOAL LC-5 CONNECTED CORRIDORS.** A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.
- LC-5.1 Improved Street Network. Systematically extend and complete a network of complete streets to ensure a high-level of multi-modal connectivity within and between adjacent Neighborhoods, Centers and Districts. Plan and implement targeted improvements to the quality and number of pedestrian and bicycle routes within the street and trail network, prioritizing connections to schools, parks, and neighborhood activity centers.
- LC-5.2 Connections Between Development Projects. Require the continuation and connectivity of the street network between adjacent development projects and discourage the use of cul-de-sacs or other dead-end routes.
- LC-5.3 Green Public Realm. Ensure that a significant tree canopy and landscaping are provided along corridors and linkages between land uses, to provide shade and wind protection for pedestrians and bicyclists, and to define these corridors as the "outdoor living rooms" of the city.
- LC-5.4 Multifamily Development. Focus new multifamily housing development along corridors between commercial nodes and centers and ensure that it is well connected to adjoining neighborhoods and centers by high-quality walking and biking routes.
- LC-5.6 Foothill Boulevard as a Connector. Transition Foothill Boulevard from a "divider" to a "connector" that brings the north and south sides together. Ensure that new development along the Foothill Corridor generates a high-quality pedestrian- and transit-oriented environment and a concentration of commercial and civic amenities and community gathering places for residents from all parts of the city.

- **GOAL LC-6 ACTIVE CENTERS**. A rich variety of commercial and mixed-use centers throughout the city, which bring a range of opportunities for shopping, dining, recreations, commerce, employment, arts and culture within easy reach of all neighborhoods.
- LC-6.1 Diverse Centers. Encourage the development of neighborhood-serving, community-serving, and city-serving centers that address the full range community needs and market sectors.
- LC-6.3 Evolving Centers. Encourage the improvement of existing commercial centers to provide more active, human-scale environments and community gathering places, including the potential for infill housing and office use.
- LC-6.4 Access to Transit. Encourage the development of commercial and mixeduse centers that are located and organized in relation to existing or planned transit stops, especially along Foothill Boulevard and Haven Avenue.
- LC-6.5 Walkable Environments. Centers should include very walkable and pedestrian-friendly streets with active building frontages along primary corridors and internal streets. In some cases, side access lanes may be inserted between existing major streets and building frontages, providing a low-speed environment that is very safe and comfortable for pedestrians and bicyclists, with pedestrian-oriented building frontages.
- **GOAL LC-7 ROBUST DISTRICTS.** A series of unique, employment-oriented environments for a range of business activities, shopping and entertainment, and community events and gathering.
- LC-7.2 Unify and Connect Development. Require that new development in the 21st Century Employment District land use designation unify and connect development along the Haven Avenue Corridor.
- LC-7.5 Adaptive Industrial Reuse. Encourage adaptive reuse with residential and live/work units, and local serving commercial, in existing industrial structures, particularly in the Central South Community Planning Area.

Open Space Element

- **GOAL OS-2 TRAILS.** A complete, connected network of diverse trails and connected open space that improve access to all areas of the city and encourages non-motorized activities.
- **OS-2.1 Trail Corridors.** Extend, improve and complete the multi-purpose trail network, wherever possible, by utilizing existing flood control channel and utility corridor rights-of-way as public trail corridors.
- **OS-2.2 Connectivity.** Connect trails in Rancho Cucamonga to trails in the San Bernardino National Forest and other hillside open space areas.

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- **OS-2.3 Trailheads.** Provide trailhead amenities such as parking, restrooms, information boards, and maps.
- **OS-2.4 Equestrian Trails.** Continue to maintain and pursue the development of planned trails and facilities for equestrian use.
- **OS-2.6 Design for Heat.** Consider extreme heat in the design of streets, parks, trails, and playgrounds to support activity throughout the year and in all weather conditions by including shade trees, shade structures, water fountains, splash pads, lighting for night play in most spaces.
- **OS-2.7 Access.** Require new development to provide access to existing or future trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities).

Mobility and Access Element

- **GOAL MA-1 REGIONAL MOBILITY HUB**. A multimodal transportation hub that connects regional and local destinations.
- MA-1.2 Rancho Cucamonga Station Redevelopment. Support redevelopment in and around the Rancho Cucamonga Station to support transit-oriented development.
- **MA-1.4 Local Mobility Hub.** Require new development at mobility hubs and key stops along the future bus rapid transit and future circulatory system to facilitate first mile/last mile connectivity to neighborhoods.
- MA-1.5 Provide Mobility Options. Provide roadway connections and local mobility hubs designed to capture 80 percent of the population and employment south of Base Line Road.
- MA-1.6 Transit Boulevard Implementation. Require high-quality transit streets to not only account for how transit is impacted by the geometry of the corridor, but also by signal timing, signal phasing, turns, and other operations that may jeopardize the quality of service.
- **GOAL MA-2 ACCESS FOR ALL.** A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all users.
- MA-2.1 Complete Streets. Require that new roadways include provisions for complete streets, balancing the needs of all users of all ages and capabilities.
- MA-2.3 Street Connectivity. Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.
- MA-2.4 Street Vacations. Prioritize pedestrian and utility connectivity over street vacations.

- MA-2.5 Context. Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.
- MA-2-6 Roadway Scale. Balance roadway size and design configuration to ensure that vehicular speeds, volumes and turning movements do not compromise the safety and comfort of pedestrians and bicyclists.
- MA-2.9 Block Pattern. Require development projects to arrange streets in an interconnected block pattern, so that pedestrians, bicyclists, and drivers are not forced onto arterial streets for inter- or intra- neighborhood travel (see Placemaking toolkit in Vol. 4 for more information).
- MA-2.10 Master Planning. Master plan sites so as to ensure a well-structured network and block pattern with sufficient access and connectivity, especially in all focus areas, including the Cucamonga Town Center, Etiwanda Heights Town Center, and the Southeast Industrial Area.
- MA-2.11 Transportation Demand Management. Require new projects to implement Transportation Demand Management strategies, such as employer-provided transit pass/parking credit, low-speed communications infrastructure for telecommuting, carpooling incentive, etc.
- MA-2.12 Healthy Mobility. Provide pedestrian facilities and class II buffered bike lanes (or separated bikeways) on auto-priority streets where feasible to promote active transportation.
- **GOAL MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.
- MA-3.2 Traffic Safety. Prioritize transportation system improvements that help eliminate traffic-related fatalities and severe injury collisions.
- MA-3.3 Vulnerable User Safety. Prioritize pedestrian improvements in the Pedestrian Priority Area shown on Figure 8 to promote safety in the southwest area of the city.
- **GOAL MA-5 SUSTAINABLE TRANSPORTATION.** A transportation network that adapts to changing mobility needs.
- MA-5.1 Land Use Supporting Reduced VMT. Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.

- **MA-5.3 Funding.** Remain flexible in the pursuit and adoption of transportation funding mechanisms that fund innovative transportation solutions.
- MA-5.4 Intelligent Systems Preparation. Upgrade the City's ATMS [Advanced Traffic Management System] and communications systems to ensure that the City meets the intelligent transportation system demands of today while planning for future demands associated with AVs and CVs.

Public Facilities and Services Element

- **GOAL PF-6 SOLID WASTE.** The volume of solid waste that enters regional landfills is minimized and the amount of recycling increased.
- **PF-6.1 Recycling.** Encourage recycling and organics collection and processing in all sectors of the community to divert items from entering landfills.
- **PF-6.2 Refuse Facilities.** Consult with public agencies and private contractors to ensure adequate organics processing facilities are available.

Resource Conservation Element

- **GOAL RC-5 LOCAL AIR QUALITY**. Healthy air quality for all residents.
- **RC-5.1 Pollutant Sources**. Minimize increases of new air pollutant emissions in the city and encourage the use of advance control technologies and clean manufacturing techniques.
- **RC-5.2** Air Quality Land Use Compatibility. Avoid siting of homes, schools, hospitals, and childcare facilities and land uses within 500 feet of land uses that are considered large emitters.
- **RC-5.3 Barriers and Buffers**. Require design features such as site and building orientation, trees or other landscaped barriers, artificial barriers, ventilation and filtration, construction, and operational practices to reduce air quality impacts during construction and operation of large stationary and mobile sources.
- **RC-5.4 Health Risk Assessment**. Consider the health impacts of development of sensitive receptors within 500 feet of a freeway, rail line, arterial, collector or transit corridor sources using health risk assessments to understand potential impacts.
- **RC-5.5 Community Benefit Plan**. Require that any land use generating or accommodating more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week, provide a community benefit plan demonstrating an offset to community impacts of the truck traffic.

- RC-5.6 New Sensitive Receptors Near Existing Industrial Uses. Avoid placing homes, schools, hospitals, and childcare facilities within 1,000 feet of a land use that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week.
- **RC-5.7** New Localized Air Pollution Sources Near Existing Sensitive Receptors. Avoid placing land uses that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week within 1,000 feet of homes, schools, hospitals, and childcare facilities.
- **RC-5.8 Truck Hook-Ups at New Industrial or Commercial Developments**. Require new industrial or commercial developments at which heavy-duty diesel trucks idle on-site to install electric truck hook-ups in docks, bays, and parking areas.
- **RC-5.9 Clean and Green Industry**. Prioritize non-polluting industries and companies using zero or low air pollution technologies.
- **RC-5.10 Dust and Odor**. Require new construction to include measures to minimize dust and odor during construction and operation.
- **GOAL RC-6 CLIMATE CHANGE.** A resilient community that reduces its contributions to a changing climate and is prepared for the health and safety risks of climate change.
- **RC-6.1 Climate Action Plan.** Maintain and implement a Climate Action Plan (CAP) that provides best management practices for reducing greenhouse gas emissions.
- **RC-6.2 Renewable Energy.** Encourage renewable energy installations and facilitate green technology and business.
- **RC-6.3 Reduce Energy Consumption.** Encourage a reduction in community-wide energy consumption.
- **RC-6.4 Urban Forest.** Protect the city's healthy trees and plant new ones to provide shade, carbon sequestration, and purify the air.
- RC-6.5GHG Reduction Goal. Reduce emissions to 80 percent below 1990 levels by
2050 and achieve carbon neutrality by 2045.
- **RC-6.6 Co-benefits.** Prioritize the development and implementation of GHG reduction measures that also achieve economic, health, social, environmental, and other co-benefits for the City and its residents and businesses.

- **RC-6.7** Structural Equity. Encourage GHG reduction and climate adaptation measures such as trail completion, equipment upgrade, sidewalk connectivity, tree planting, and buffers be included in the City's Capital Improvement Program (CIP) to improve areas of the City where these features are lacking.
- **RC-6.8 Reduce Vehicle Trips.** Require Transportation Demand Management strategies such as employer provided transit pass/parking credit, bicycle parking, bike lockers, high-speed communications infrastructure for telecommuting, carpooling incentive, etc. for large office, commercial, and industrial uses.
- **RC-6.9** Access. Require pedestrian, vehicle, and transit connectivity of streets, trails, and sidewalks, as well as between complementary adjacent land uses.
- **RC-6.10 Green Building.** Encourage the construction of buildings that are certified LEED or equivalent, emphasizing technologies that reduce GHG emissions.
- **RC-6.11 Climate-Appropriate Building Types**. Encourage alternative building types that are more sensitive to and designed for passive heating and cooling within the arid environment found in Rancho Cucamonga.
- **RC-6.12 Reduced Water Supplies**. When reviewing development proposals, consider the possibility of constrained future water supplies and require enhanced water conservation measures.
- **RC-6.13 Designing for Warming Temperatures.** When reviewing development proposals, encourage applicants and designers to consider warming temperatures in the design of cooling systems.
- **RC-6.14 Designing for Changing Precipitation Patterns**. When reviewing development proposals, encourage applicants to consider stormwater control strategies and systems for sensitivity to changes in precipitation regimes and consider adjusting those strategies to accommodate future precipitation regimes.
- **RC-6.15 Heat Island Reductions**. Require heat island reduction strategies in new developments such as light-colored paving, permeable paving, right-sized parking requirements, vegetative cover and planting, substantial tree canopy coverage, and south and west side tree planting.
- **RC-6.16 Public Realm Shading**. Strive to improve shading in public spaces, such as bus stops, sidewalks and public parks and plazas, through the use of trees, shelters, awnings, gazebos, fabric shading and other creative cooling strategies.
- **RC-6.17 Off-site GHG Mitigation**. Allow the use of creative mitigation efforts such as offsite mitigation and in lieu fee programs as mechanisms for reducing project-specific GHG emissions.

- **RC-6.18** Water Sources with Low GHG Emissions. Encourage local and regional water utilities to obtain water from sources with low or no GHG emissions.
- **GOAL RC-7 ENERGY.** An energy efficient community that relies primarily on renewable and non-polluting energy sources.
- **RC-7.1 Electric Vehicle (EV) Charging on City Property.** As funding is available, encourage the installation of publicly available electric vehicle charging stations at City-owned buildings, facilities, property, and in the public right-of-way.
- **RC-7.2 New EV Charging**. Require new multifamily residential, commercial, office, and industrial development to include charging stations, or include the wiring for them.
- **RC-7.3 EV Charging Retrofits**. Encourage existing development to retrofit to include charging stations.
- **RC-7.4 New Off-Road Equipment**. When feasible, require that off-road equipment such as forklifts and yard tugs necessary for the operations of all new commercial and industrial developments be electric or fueled using clean fuel sources.
- **RC-7.5 Municipal Vehicle Fleet.** Reduce fossil fuel consumption of the City's vehicle fleet by increasing the number of electric or zero emissions vehicles.
- **RC-7.6 Efficiency Retrofits.** Encourage existing private property owners to implement energy efficiency retrofits during substantial improvement as defined by the California Building Code.
- **RC-7.7 Sustainable Design.** Encourage sustainable building and site design that meets the standards of Leadership in Energy and Environmental Design (LEED), Sustainable Sites, Living Building Challenge, or similar certification.
- **RC-7.8** Farmers Market, Fork to Table. Support microscale agriculture and farmers markets, and similar methods of encouraging locally grown and consumed produce.
- **RC-7.9 Passive Solar Design.** Require new buildings to incorporate energy efficient building and site design strategies for the arid environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.
- **RC-7.10** Alternative Energy. Continue to promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.

- **RC-7.11 Community Development Subdivisions.** When reviewing applications for new subdivisions, require residences be oriented along an east-west access, minimizing western sun exposure, to maximize energy efficiency.
- **RC-7.12** Solar Access. Prohibit new development and renovations that impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.
- **RC-7.13 Energy-Efficient** Infrastructure. Whenever possible, use energy-efficient models and technology when replacing or providing new city infrastructure such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.

5.3.4 ENVIRONMENTAL IMPACTS

5.3.4.1 Methodology

This program-level analysis evaluates air quality impacts of General Plan Update implementation based on construction and operational activities associated with assumed land use development for the buildout year of 2040 relative to existing (2021) land use development in the city.

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of development. Air quality impacts can nevertheless be acute during construction periods, potentially resulting in adverse localized impacts to air quality. Construction-related emissions are difficult to quantify with a high degree of accuracy at the general plan level because such emissions are dependent on the characteristics and circumstances of future individual development projects that are not known at this time. However, because construction associated with buildout under the General Plan Update would generate temporary criteria pollutant emissions, primarily due to the operation of construction equipment (e.g., NO_X from vehicle exhaust, VOC from architectural coatings) and truck trips, emissions have been estimated in this analysis and are based on the anticipated amount of development under buildout the General Plan Update.

Construction-related emissions of criteria air pollutants and precursors were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 computer program (CAPCOA 2016). Modeling was based on information specific to the General Plan Update, including proposed land use designations and types. For modeling purposes, construction activities under the General Plan Update are assumed to occur between 2021 and 2040 (19 years). Although the exact timing of construction activity over this period is unknown, for the purposes of modeling, it was assumed that development would occur gradually in equal annual increments over this time period. Maximum daily emissions were generated using CalEEMod default outputs for the first possible year of construction, which would be 2022. See Table 5.3-8, *Land Use Assumptions for Air Quality Modeling in 2040 Buildout Scenario*, for a full list of land use assumptions used for the modeling. Where information specific to the General Plan Update was not available, default values in CalEEMod were used.

Land Use Type	Amount	Unit
Single Family Housing	3,944	Dwelling units
Low-Rise Multi Family Housing	21,741	Dwelling units
Retail	4,147,200	Square feet
Hotel	1,179	Rooms
Office	2,636,673	Square feet
Industrial: Warehouse and Distribution	2,408,000	Square feet
Industrial: Manufacturing	1,719,200	Square feet
Art, Entertainment, Recreation	156,000	Square feet

Table 5.3-8	Land Use Assumptions for Air Quality Modeling in 2040 Buildout Scenario
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Operational emissions of criteria air pollutants and precursors were also estimated using CalEEMod. Modeling used information specific to the General Plan Update where available, including assumptions associated with land use designations and types that would be developed as part of the General Plan Update. Where information specific to the General Plan Update was not available, default values in CalEEMod were used that are based on South Coast AQMD's climate and land use types. See Table 1 of Appendix 5.3-1 for a full list of land use assumptions used for the modeling. Operational emissions were estimated using CalEEMod for the following sources: area sources (e.g., landscaping equipment), energy use (i.e., electricity and natural gas consumption) and mobile sources (vehicle trips and VMT). CalEEMod default energy consumption rates were adjusted to account for energy efficiency improvements from the 2019 California Energy Code (24 CCR Part 6), which will result in an average of 7 percent and 30 percent reductions in energy consumption for residential and nonresidential, respectively, when compared with the 2016 California Energy Code in CalEEMod (CEC 2018).

Mobile-source emissions were estimated using a combination of CalEEMod and EMFAC2017, daily VMT estimates in the traffic analysis for the General Plan Update, and vehicle emissions factors specific to San Bernardino County. The annual VMT estimates were generated from a customized San Bernardino Transportation Analysis model and were included in the traffic study (Appendix 5.17-1). VMT estimates were generated for the model baseline year (2016) based on 2018 land uses in the city and for the target year (2040) based on the land uses in the Ceneral Plan Update. Mobile-source emissions associated with the target year (2040) were quantified using EMFAC2017 emission factors contained within CalEEMod.

Some localized areas, such as traffic-congested intersections, can have elevated carbon monoxide concentrations (CO hotspots). CO hotspots are defined as locations where ambient CO concentrations exceed the California AAQS (20 ppm for 1-hour standard, 9 ppm for 8-hour standard). All areas of the SoCAB have remained below the federal standard level since 2003. The EPA redesignated the SoCAB to attainment of the federal CO standards, effective June 11, 2007. There have also been no exceedances of the Stage 1 episode (federal alert) level (8-hour average CO greater \geq 15 ppm) since 1997. The CO concentrations are also well below the State standards (South Coast AQMD 2016). Therefore, no CO hotspots are expected in the city from development associated with the General Plan Update, and additional CO modeling analysis

is not warranted. In addition, with stricter emission standards due to State regulations, CO ambient concentrations should remain at or lower than the most recent CO monitoring data available for the SoCAB.

The level of health risk from exposure to construction- and operation-related TAC emissions was assessed qualitatively because of the programmatic nature of the project and the fact that the specific types and locations of future discretionary projects are unknown. As defined in the May 2020 Existing Conditions Report, sensitive receptors are populations or uses that are more susceptible to the effects of air pollution than the general population, such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

The assessment of odor-related impacts is based on the types of odor sources associated with the land uses that would be developed under the General Plan Update and their location relative to nearby sensitive receptors.

5.3.4.2 Impact Analysis

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.3-1: The proposed project would not conflict with or obstruct implementation of the 2016 Air Quality Management Plan. [Threshold AQ-1]

The San Bernardino portion of the SoCAB is in nonattainment for ozone and $PM_{2.5}$ with respect to the National and California AAQS, and PM_{10} relative to the California AAQS. As a result, South Coast AQMD is required to develop a plan to achieve and maintain the federal and State standards by the earliest practicable date. The 2016 South Coast AQMD AQMP addresses the attainment and maintenance of the National AAQS.

The 2016 AQMP control strategy strongly relies on a transition to zero and near-zero emission technologies in the mobile source sector, including automobiles, transit buses, medium- and heavy-duty trucks, and off-road equipment. The AQMP focuses on existing commercialized technologies and energy sources, including their supporting infrastructure, along with newer technologies that are nearing commercialization based on recent demonstration programs and limited test markets. The 2016 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures; incentive-based programs; co-benefits from climate programs; and mobile source strategies and reductions from federal sources, which include aircraft, locomotives, and ocean-going vessels. These strategies are to be implemented in partnership with CARB and the EPA. In addition, the 2016 AQMP integrates with SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS), which includes transportation programs, measures, and strategies generally designed to reduce VMT and related air pollutant emissions from vehicles. There are also several General Plan Update policies that ensure consistency with the 2016 AQMP. Goal RC-5 and underlying policies are aimed at achieving healthy air quality for all residents. In addition, several action items in the General Plan Update (see Volume 4: Chapter 1 of General Plan Update) include close coordination and collaboration with South Coast AQMD and other neighboring agencies to effectively update and implement the AQMP:

- Coordinate air quality improvement activities with those of neighboring local governments and other agencies, including SCAG, San Bernardino Council of Governments (SBCOG), and South Coast AQMD, to maximize the potential local and regional air quality benefits of City activities.
- Collaborate with South Coast AQMD to review and provide input on regional air quality plans and to identify and implement best management practices to meet and maintain State and Federal ambient air quality standards.
- Support programs and investments that increase ride sharing, reduce pollutants generated by vehicle use, and meet the transportation control measures recommended by South Coast AQMD in the adopted Clean Air Plan.

Implementation of these policies and action items would be consistent with the control strategy of the 2016 AQMP. In addition to the General Plan Update policies that support AQMP consistency and air pollutant emissions reductions, the City has prepared a Climate Action Plan (CAP) as a companion document to the General Plan Update that includes a set of goals, strategies, and measures with specific metrics and quantified GHG reduction estimates that will achieve greenhouse gas (GHG) reductions from existing and future development in the city. While intended to reduce GHG emissions, this set of strategies and measures would also have the effect of reducing air pollutant emissions under implementation of the General Plan Update. The CAP strategies and measures would reduce both localized air pollutant emissions within the city and regionwide emissions in the South Coast Air Basin. Specifically, the following CAP strategies would reduce air pollutant emissions associated with construction and operation of new development.

- Strategy 1.2: EV Charging at New Development New construction and major alternatives are to provide "EV capable" and "EV install" parking spaces according to land use type.
- Strategy 1.4: New Off-Road Equipment Adopt an ordinance or update development code requiring off-road equipment associated with the operation of new commercial and industrial development to be electric or fueled using low carbon alternative fuels such as renewable diesel.
- Strategy 1.6: Construction Vehicle Fleets Adopt an ordinance or update development code that requires 75 percent of heavy-duty vehicles in construction fleets operating in the city to be electric or zero emissions vehicles by 2030, and 100 percent electric or zero emissions by 2040.
- Strategy 3.1: Zero Net Energy for New Residential Buildings Adopt an ordinance or update development code requiring that new single- and multi-family residential units include zero net energy (i.e., on-site generation of energy is equal to on-site energy consumption).
- Strategy 3.2: Zero Net Energy for New Nonresidential Buildings Adopt an ordinance or update development code requiring new non-residential development to install PV solar panels and be zero net energy.

- Strategy 3.3: Solar at New Warehouses Adopt an ordinance or update development code requiring new development of industrial and warehouse uses to install PV solar panels that generate electricity equal to anticipated building consumption.
- Strategy 5.1: RCMU Renewable Electricity Supply Procure carbon free sources for 75 percent of electricity supplied by RCMU by 2030.
- Strategy 5.2: Electricity Supply Choice Join an existing CCA or develop a Cityadministered CCA program and provide energy purchasing options for residents and businesses in the city that are generated from renewable resources. The CCA should provide two purchasing plan options for customers:
 - A basic plan would include electricity that is generated from renewable resources consistent or above the levels required by the Renewable Portfolio Standard
 - A 100% renewable electricity option should be provided which offers electricity generated from 100 percent renewable resources
- Strategy 12.1: Transportation Demand Management Adopt an ordinance or update development code requiring new development to implement TDM strategies that reduce VMT by 5 percent in new development by 2030 and 10 percent by 2030 or later.

The following CAP strategies addressing GHG emissions from existing development and existing activities in the city would also reduce localized and regionwide air pollutant emissions under implementation of the General Plan Update.

- Strategy 1.1: EV Charging at Existing Developments Use EV Readiness Plan to determine the most appropriate and efficient location to install Level II EV chargers at public facilities and non-residential uses. In addition, the City will develop an outreach and education program to inform residents and business owners about available incentives to encourage the installation of Level II EV charging stations at existing private residential development and commercial and retail development.
- Strategy 1.3: Zero Emission and Clean Equipment Develop an incentive program to support the replacement of heavy-duty equipment operating at existing industrial and commercial facilities with zero emissions vehicles.
- Strategy 1.5: Municipal Vehicle Fleet Transition 50 percent of the City's light and medium-duty vehicle fleet to electric or zero emissions by 2030 and transition 100 percent of the City's light and medium-duty vehicle fleet, and fire trucks to electric or zero emissions by 2040.
- Strategy 2.2: Solar at Existing Warehouses and Commercial Land Uses Develop an incentive program to install PV solar panels on existing nonresidential rooftops.
- Strategy 2.3: Renewable Energy Retrofits Continue to implement the RCMU Renewable Energy Program and work with SCE to provide incentives for existing private development to install on-site PV solar systems.

- Strategy 4.1: Municipal Energy Conservation
 - Reduce energy consumed at existing City-facilities by 15 percent below baseline energy consumption levels by 2030, and 20 percent below baseline energy consumption levels by 2040.
 - Develop a lighting efficiency plan that identifies a schedule for the replacement of halogen light bulbs used in outdoor lighting to be LED.
- Strategy 4.2: Renewable Energy at Municipal Facilities Install PV solar at City-owned facilities to provide electricity equal to 30 percent of City-facility consumption by 2030, and 50 percent of City-facility consumption by 2040.
- Strategy 5.1: RCMU Renewable Electricity Supply Procure carbon free sources for 75 percent of electricity supplied by RCMU by 2030.
- Strategy 8.1: Water Efficient Landscaping Retrofits Develop an incentive program to encourage the installation of water efficient landscapes (e.g., drought tolerant plants, artificial turf) to reduce outdoor water consumption at existing private development by 20 percent.
- Strategy 11.1: Local Mobility Hubs Develop a mobility hub plan that increases transit mode share by three (3) percent by 2030, and 10 percent by 2040.
- Strategy 11.2: Pedestrian and Bicycle Network
 - Increase the total City street length with bike lanes to 30 percent by 2030 and 40 percent by 2050 through the development of a bicycle network.
 - Develop a bicycle network throughout the city that provides continuous bicycle infrastructure between key destinations by 2030.
- Strategy 13.1: Emerging Technologies Complete signal timing improvements along 50 percent of key commute corridors by 2030, and 100 percent of key commute corridors by 2040.

The 2016 AQMP is based, in part, on regional growth projections for the South Coast Air Basin, which are derived from the regional growth forecast used in SCAG's 2016 RTP/SCS. The growth in population projected for the General Plan Update is not fully accounted for in the 2016-2040 SCAG growth forecasts because those forecasts were made before the sixth cycle regional housing needs assessment (RHNA) estimates resulting from a statewide housing crisis. The City's RHNA requires that the General Plan Housing Element be able to accommodate over 10,000 housing units that could add over 30,000 new residents over an eight-year period. While this is unlikely given the historical growth pattern for the City, the potential remains, and the growth potential is different than the RTP/SCS forecast. Although the population projected under the proposed project would be higher than forecast for the City in the SCAG forecast used in the AQMP, this does not necessarily indicate that the overall growth projections for the region would be different than those included in the AQMP.

The 2040 population projection for the City of Rancho Cucamonga in the RTP/SCS is 204,300, which is less than the projected population for planning period buildout of the General Plan Update of 233,088. However, the General Plan Update, including the companion CAP document, are both consistent with the goals of the RTP/SCS and would further AQMP goals through policies, strategies, and measures that reduce air pollutant emissoins from mobile, stationary, and areawide sources. Therefore, the General Plan Update would not conflict with or obstruct implementation of the 2017 AQMP. This impact is less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.3-1 would be less than significant.

Impact 5.3-2: The proposed project would cause construction-generated criteria air pollutant or precursor emissions to exceed South Coast AQMD's recommended thresholds. [Threshold AQ-2]

The General Plan Update would accommodate future development of single-family and lowrise multifamily residential, retail, hotel, office, art/entertainment/recreation, and industrial (warehouse and distribution and manufacturing) land uses. The future development and other physical changes that could result from General Plan Update implementation would generate construction-related emissions of criteria air pollutants and precursors, including VOC, NO_x, PM₁₀, and PM₂₅ from site preparation (e.g., excavation, clearing), off-road equipment, material delivery, worker commute trips, and other activities (e.g., building construction, asphalt paving, application of architectural coatings). Typical construction activities that could occur with land use development include use of all-terrain forks, forklifts, cranes, pick-up and fuel trucks, compressors, loaders, backhoes, excavators, dozers, scrapers, pavement compactors, welders, concrete pumps, concrete trucks, and off-road haul trucks as well as other diesel-powered equipment as necessary. Fugitive dust emissions of PM₁₀ and PM_{2.5} would be associated primarily with site preparation/grading, and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance, and mobile sources. Emissions of ozone precursors would occur from the exhaust of construction equipment and on-road vehicles. Paving and the application of architectural coatings also would result in off-gas emissions of VOC. PM_{10} and PM_{2.5} would also be emitted from off-road equipment and vehicle exhaust.

As discussed previously, specific construction phasing and intensity are unknown. The levels of emissions generated through these activities would depend on the characteristics of individual future development projects under the General Plan Update, including the size and type of land uses being developed, which would determine the length and intensity of construction activity.

Construction activities were assumed to occur at a constant rate over the General Plan Update horizon period of 19 years to provide an illustrative analysis of construction emissions. Table 1 of Appendix 5.3-1 details the assumed development under the General Plan Update. Based on

Table 5.3-8, construction emission estimates were modeled and are shown in Table 5.3-9, Modeled Maximum Daily Emissions of Criteria Air Pollutants and Precursors Emissions (Ib/day).

Construction Phase	voc	NOx	со	PM 10	PM _{2.5}
Site Preparation	4	45	28	90	22
Grading	6	63	44	66	15
Building Construction	15	95	133	59	17
Paving	1	11	15	1	1
Architectural Coating	257	2	10	3	1
Maximum Daily Emissions	272	109	143	156	37
South Coast AQMD Threshold	75	100	550	150	55

Table 5.3-9Modeled Maximum Daily Emissions of Criteria Air Pollutants and
Precursors Emissions (lb/day)

Source: Modeling conducted by Ascent Environmental in June 2021 using CalEEMod v. 2016.3.2. Appendix 5.3-1

Notes: VOC = volatile organic compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = respirable particulate matter; PM₂₅ = fine particulate matter; lb/day = pounds per day; South Coast AQMD = South Coast Air Quality Management District.

Highest emissions of VOC and CO would occur when building construction and architectural coating activities overlap. Highest emissions of NO_X, PM₁₀, and PM₂₅ would occur when site preparation and grading activities overlap.

Because specific information about construction duration, intensity, and overlap is not known at this time, the modeling did not include specific reduction actions pursuant to the City's standard conditions of approval. Such conditions would be enforced on a project-by-project basis.

Emissions of oxides of sulfur and lead are expected to be minimal and well below South Coast AQMD's recommended thresholds. This is demonstrated in the modeling output files included in Appendix 5.3-1.

As shown above, construction activity associated with the General Plan Update would generate VOC, NO_X, and PM₁₀ emissions in excess of South Coast AQMD's recommended thresholds. Construction activities resulting from implementation of the General Plan Update could contribute substantially to the SoCAB's nonattainment status for ozone, PM₁₀, and PM₂₅ and could result in an increase in the potential for adverse health impacts from these pollutants. Policy RC-5.10 of the General Plan would require new construction to include measures to minimize dust and odor during construction and operation. In addition, several action items in the General Plan Work Plan (see Volume 4: Chapter 1 of General Plan Update) are aimed at reducing emissions from construction and operational activities in the city:

- Ensure appropriate air quality CEQA significance thresholds from the South Coast AQMD are applied to review of development.
- Require new development that exceeds applicable air quality thresholds to notify nearby residents and business of potential pollutants.
- Consult with the air quality management district, incorporate feasible best management practices for substantially reducing or avoiding air pollutant emissions during construction and operational phases.
- Ensure dust control provisions in the City's Development Code meet South Coast AQMD standards as they are updated.

Implementation of these policies and action items would reduce construction-generated emissions of criteria air pollutants and precursors, but it cannot be guaranteed that emissions from individual discretionary projects would be reduced to below the South Coast AQMD thresholds.

The addition of NO_x, which is a precursor to ozone, could result in an increase in ambient concentrations in the SoCAB and, moreover, increase the likelihood that ambient concentrations exceed the California and National AAQS. As summarized in the May 2020 Existing Conditions Report, human exposure to ozone may cause acute and chronic health impacts including coughing, pulmonary distress, lung inflammation, shortness of breath, and permanent lung impairment. Also, the increase in construction-generated emissions of PM_{10} and PM₂₅ could impede air quality planning efforts to bring the SoCAB into attainment of the AAQS. However, it would be misleading to correlate the levels of criteria air pollutant and precursor emissions associated with implementation of the General Plan Update to specific health outcomes to sensitive receptors. While the description of the effects noted above could manifest in receptors, actual effects on individuals depend on individual factors, such as life stage (e.g., older adults are more sensitive), preexisting cardiovascular or respiratory diseases, and genetic polymorphisms. Even armed with this type of specific medical information (which is confidential to the individual), there are wide ranges of potential health outcomes from exposure to ozone precursors and particulate matter, from no effect to the effects described above. Therefore, other than determining the types of health effects that could occur, it would be speculative to more specifically correlate exposure to ozone precursors and particulates from the General Plan Update to specific health outcomes to receptors. By evaluating emissions of air pollutants against South Coast AQMD's thresholds, it is foreseeable that health complications associated with ozone, PM₁₀, and PM₂₅ exposure could be exacerbated at nearby sensitive receptors by construction-generated emissions.

Due to the nonattainment status of the SoCAB for ozone, PM_{10} , and PM_{25} , construction activities associated with implementation of the General Plan Update may result in adverse air quality impacts to surrounding land uses and may contribute to the existing adverse air quality condition in the city. Further, because actual construction phasing is not known, it is possible that emissions may exceed or be below modeled emissions shown in Table 5.3-9. Nonetheless, based on conservative modeling, it is likely that emissions would exceed South Coast AQMD thresholds at some point during buildout of the General Plan Update. The Resource Conservation Element of the General Plan Update includes goals and policies focused on reducing criteria air pollutant and precursor emissions from construction activity. However, implementation of these policies cannot guarantee construction-generated emissions would be reduced to below the South Coast AQMD thresholds. Therefore, construction emissions could contribute to the existing nonattainment condition in the SoCAB and the city with respect to the California and National AAQS for ozone and PM₂₅ and with respect to the California to ozone and PM₁₀.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-2 would be potentially significant.

Mitigation Measures

No additional feasible mitigation measures are available.

Level of Significance After Mitigation: Implementation of standard conditions of approval 5.3-1 through 5.3-4 would reduce impacts to air quality to the extent feasible because construction-related emissions of criteria air pollutants and precursors would be minimized through the use of the highest rate diesel engines available for heavy-duty, off-road equipment and dust suppression techniques. While these measures would reduce potential impacts of future development projects, Impact 5.3-2 would still be significant and unavoidable.

Impact 5.3-3: The proposed project would result in a net increase in long-term operational criteria air pollutant and precursor emissions that exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]

Future development and other physical changes that could occur as a result of General Plan Update implementation would result in long-term operational emissions of VOC, NO_X, PM₁₀, and PM_{2.5}. Operational emissions would be generated from area sources (e.g., landscapingrelated fuel combustion sources, the periodic application of architectural coatings, and the use of consumer products), energy use (e.g., electricity and natural gas), and from vehicle trips associated with new land use development. Table 5.3-10, *Summary of Maximum Daily Operational Emissions of Criteria Air Pollutants and Precursors in 2040 (lb/day)*, summarizes the maximum daily operation-related emissions of criteria air pollutants and precursors and the daily significance thresholds established by South Coast AQMD.

As shown in Table 5.3-10, operational activities would result in emissions of VOC, NO_X, CO, PM₁₀, and PM₂₅ that exceed the South Coast AQMD thresholds of significance. As discussed in the "Thresholds of Significance" section, South Coast AQMD developed these thresholds in consideration of achieving and maintaining the National and California AAQS, which represent concentration limits of criteria air pollutants and precursors needed to adequately protect human health. Therefore, the General Plan Update's contribution to operational criteria air pollutants and precursors could result in greater acute or chronic health impacts compared to existing conditions.

Source Type	voc	NOx	со	PM 10	PM _{2.5}
Area	1,035	583	2,349	57	57
Energy	19	161	89	13	13
Mobile	41	217	839	595	160
Maximum Daily Emissions	1,095	961	3,277	665	230
South Coast AQMD Threshold	55	55	550	150	55

Table 5.3-10Summary of Maximum Daily Operational Emissions of Criteria AirPollutants and Precursors in 2040 (lb/day)

Source: Modeling conducted by Ascent Environmental in June 2021 using CalEEMod v. 2016.3.2. Appendix 5.3-1

Notes: VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; South Coast AQMD = South Coast Air Quality Management District.

Emissions of oxides of sulfur and lead are expected to be minimal and well below South Coast AQMD's recommended thresholds. This is demonstrated in the modeling output files included in Appendix 5.3-1.

Stationary sources, such as boilers, heaters, flares, and other types of combustion equipment associated with industrial uses undergo a permitting process by South Coast AQMD. The permits approved by South Coast AQMD require emission caps for sources that are tied to attaining or maintaining the AAQS. Stationary sources are required to implement and comply with applicable South Coast AQMD rules for their specific operation. For example, rules pursuant to South Coast AQMD Regulation XIII, New Source Review, requires the implementation of best available control technology, which may include the installation of emissions control equipment or implementation of administrative practices to reduce emissions, as deemed necessary by South Coast AQMD. A stationary source may also be required to offset its emissions of criteria air pollutants and precursors in order to be permitted. All new stationary sources that could be developed under the General Plan Update would be required to go through the permitting process and receive approval by South Coast AQMD prior to construction and operation. The South Coast AQMD permitting program is a regulated process in which applicable industrial and commercial businesses are required to comply with South Coast AQMD rules related to their respective operations. Examples of permitted sources include gas stations, auto body shops that perform motor vehicle coating on-site, landfills, graphic arts operations, and asphalt production. The South Coast AQMD permitting program also requires source testing of emission control equipment, operation and maintenance plan requirements of permitted equipment to ensure maintenance is being kept, monitoring of operating parameters to ensure compliance with South Coast AQMD rules and regulations, recordkeeping requirements, annual emissions inventory reporting, and annual compliance inspections by air district staff to ensure all permit conditions are being met.

The General Plan Update includes policies that would reduce emissions of air pollutants associated with individual development projects. Notable policies are listed here:

- LC-1.4 Connectivity and Mobility. Work to complete a network of pedestrian- and bikefriendly streets and trails, designed in concert with adjacent land uses, using the public realm to provide more access options.
- **LC-1.9 Infill Development.** Enable and encourage infill development within vacant and underutilized properties through flexible design requirements and potential incentives.

- LC-2.7 Shared Parking. Encourage structured and shared parking solutions that ensure that parking lots do not dominate street frontages and are screened from public views whenever possible.
- **LC-2.11 Park-Once.** Allow and encourage strategies that enable adjacent uses and properties to flexibly share parking facilities, so that users can park once and pursue multiple activities on foot before returning to their car, such as:
 - Unbundling parking from development
 - Considering parking "districts" demonstrating sufficient parking within a convenient walking distance.
- LC-4.2 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining residential or commercial development and provide for future connections into any adjoining vacant parcels.
- **LC-4.8 Solar Orientation.** Street, block, and lot layouts should orient a majority of lots within 20 degrees of a north-south orientation for increased energy conservation.
- LC-5.1 Improved Street Network. Systematically extend and complete a network of complete streets to ensure a high-level of multi-modal connectivity within and between adjacent Neighborhoods, Centers and Districts. Plan and implement targeted improvements to the quality and number of pedestrian and bicycle routes within the street and trail network, prioritizing connections to schools, parks, and neighborhood activity centers.
- LC-5.4 Multifamily Development. Focus new multifamily housing development along corridors between commercial nodes and centers and ensure that it is well-connected to adjoining neighborhoods and centers by high quality walking and biking routes.
- **LC-6.4 Access to Transit.** Encourage the development of commercial and mixed-use centers that are located at and organized in relation to existing or planned transit stops, especially along Foothill Boulevard and Haven Avenue.
- LC-6.5 Walkable Environments. Centers should include very walkable and pedestrianfriendly streets with active building frontages along primary corridors and internal streets. In some cases, side access lanes may be inserted between existing major streets and building frontages, providing a low-speed environment that is very safe and comfortable for pedestrians and bicyclists, with pedestrian-oriented building frontages.

In addition, the Mobility Element includes goals and policies related to a multimodal transportation hub that connects regional and local destinations (Goal MA-1 and Policies MA-1.1 through MA-1.6); a safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all users (Goal MA-2 and Policies MA-2.1 through MA-2.11); a transportation network that adapts to changing mobility needs while preserving sustainable community values (Goal MA-3 and Policies MA-3.1 through MA-3.4); an efficient goods movement system that ensures timely deliveries without compromising quality of life, safety and smooth traffic flow for residents and businesses (Goal MA-4 and Policies MA-4.1 through MA-4.5); and a transportation network that adapts to changing mobility needs (Goal MA-5 and Policies MA-5.4). These goals and policies would help reduce VMT and shift mobility choices to alternative modes of transportation.

Residents of Rancho Cucamonga are subject to ozone, PM₁₀, and PM_{2.5} concentrations that exceed both National and State AAQS, along with their resulting health impacts, which affect many communities across San Bernardino County, including the city of Rancho Cucamonga. These exceedingly high concentrations of ozone, PM₁₀, and PM_{2.5} result in several adverse health effects for residents, especially sensitive receptors such as children, older adults, and people with asthma or other existing lung conditions, including inflammation of the lining of the lungs, reduced lung function, and increased respiratory symptoms such as cough, wheezing, chest pain, burning in the chest, and shortness of breath.

While there are policies in the General Plan Update that would reduce criteria air pollutant and precursor emissions, it is unknown if emission levels from future development would be reduced below the South Coast AQMD thresholds. Because the SoCAB is in nonattainment for California and National AAQS for ozone and PM_{2.5} and for California AAQS for PM₁₀, future development under the General Plan Update could contribute to the existing nonattainment status.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-3 would be potentially significant.

Mitigation Measures

The General Plan Update policies described above require implementation of all feasible mitigation measures for all discretionary development projects. While individual projects may be able to reduce emissions to levels below applicable thresholds, the total emissions attributable to future development under the General Plan Update would exceed SCAQMD's thresholds and would be a considerable contribution to cumulative air pollutants in the region. Notably, ROG emissions from consumer products and CO emissions from landscaping equipment are the highest contributors to emissions of those pollutants based on modeling conducted. These emissions are dependent on residents' individual choices and the City has limited ability to mandate behavior changes to reduce such impacts. Therefore, no additional feasible mitigation measures are available to reduce this impact.

No additional feasible mitigation measures.

Level of Significance After Mitigation: Impact 5.3-3 would be significant and unavoidable.

Impact 5.3-4: The proposed project would not result in short- or long-term increases in localized CO emissions that would exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]

Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, vehicle speed, and traffic delay. A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. Transport and dispersal of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. However, under stable meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels, adversely affecting nearby sensitive land uses, such as residential units,

hospitals, schools, and childcare facilities. CO is a pollutant of localized concern, and therefore is analyzed at the local level. Construction activities are rarely a cause of localized CO impacts because they do not typically result in substantial traffic increases at any one location. This impact focuses on operational increases in mobile sources of CO and is based on guidance available from SCAQMD.

As discussed in Section 5.3.4.1, "Methodology," all areas of the SoCAB have remained below the federal standard level since 2003. The EPA redesignated the SoCAB to attainment of the federal CO standards, effective June 11, 2007. There have been no exceedances of the Stage 1 episode (federal alert) level (8-hour average CO greater ≥ 15 ppm) since 1997. The CO concentrations are also well below the State standards. The CO hotspot analysis conducted for the attainment by SCAQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods (SCAQMD 2003). The busiest intersection evaluated had a daily traffic volume of approximately 100,000 vehicles per day with level of service (LOS) E in the morning peak hour and LOS F in the evening peak hour. A project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour in order to generate a significant CO impact (BAAQMD 2017). Buildout of the General Plan update would not result in the increase in traffic volume required to generate a CO hotspot. While daily mass emissions of CO are projected to exceed SCAQMD's thresholds under Impact 5.3-3, the highest emissions of CO are projected from use of dispersed landscaping equipment in the city. Therefore, CO emissions from idling vehicles are not anticipated to cause a localized impact.

Given that the SoCAB is in attainment for CO and is not projected to exceed the AAQS, it is not anticipated that the General Plan Update would result in localized CO impacts, considering that individual discretionary projects implemented under the General Plan Update would be dispersed throughout the city. Additionally, federal and State vehicle emissions standards are anticipated to result in a decrease in CO concentrations over time. These include the Corporate Average Fuel Economy standards at the federal level and the Advanced Clean Cars Program in California, both of which set fuel efficiency standards for vehicles.

For these reasons, local mobile-source CO emissions generated by future development that could be accommodated under the General Plan Update would not result in or substantially contribute to concentrations of CO that exceed the 1-hour or 8-hour California or National AAQS.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.3-4 would be less than significant.

Impact 5.3-5: The proposed project would expose sensitive receptors to substantial increases in toxic air contaminant emissions. [Threshold AQ-3]

Diesel particulate matter (diesel PM) was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of diesel PM outweighs the potential for all other health impacts (i.e., noncancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2003). Thus, diesel PM is the focus of this analysis. Regarding exposure to diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. According to the Office of Environmental Health Hazard Assessment's guidance, exposure of sensitive receptors to TAC emissions should be based on a 30-year exposure period for estimating cancer risk at the maximum exposed individual, with 9- and 70-year exposure period is required for estimating cancer burden or providing an estimate of population-wide risk (OEHHA 2015:8-1).

Construction Emissions

Future development and other physical changes that could occur as a result of General Plan Update implementation would generate temporary, intermittent emissions of diesel PM from the exhaust of off-road heavy-duty diesel-powered equipment used for site preparation, grading, paving, application of architectural coatings, on-road truck travel, and other miscellaneous activities.

Individual sensitive receptors were not identified at the general plan scale as existing sensitive receptors are located throughout the Plan Area. Studies show that diesel PM is highly dispersive and that concentrations of diesel PM decline with distance from the source (Zhu et al. 2002a). These studies illustrate that receptors must be near emission sources for a long period to experience exposure at concentrations of concern.

Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Plan Area (i.e., construction is not likely to occur in any one part of the Plan Area for an extended time), the dose of diesel PM that any one receptor is exposed to would be limited. Therefore, considering the relatively short duration of diesel PM-emitting construction activity at any one location of the Plan Area, and the highly dispersive properties of diesel PM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions.

Operational Emissions

Proximity to highways increases exposure to diesel PM and cancer risk. Similarly, proximity to heavily traveled transportation corridors and intersections would expose residents to higher levels of diesel PM. CARB recommends avoiding siting new sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day (CARB 2005). As discussed in the May 2020 Existing Conditions Report, and based on 2018

traffic data, several interstate and route segments located within or adjacent to the city include annual average daily traffic volumes in excess of 100,000 vehicles per day on Interstate 15 and State Route 210:

- I-15 at the junction with the I-10 (210,000 AADT)
- I-15 at the junction with Base Line Road (160,000 AADT)
- I-15 at Miller Avenue (180,000 AADT)
- SR-210 at the junction with Haven Avenue (200,000 ADT)

Additionally, implementation of the General Plan Update would accommodate future development that could generate new sources of TACs from industrial and commercial land uses. Per South Coast AQMD Rule 1401 (New Source Review of Toxic Air Contaminants), land uses that would construct or reconstruct stationary emissions from a major source would be required to obtain a permit and would have to install "best available control technology for toxics" if deemed applicable by South Coast AQMD.

Due to the programmatic level of this analysis, the number of specific types of projects and land uses and the timing of their development are not available. It is possible that future development as a result of the General Plan Update could result in new stationary sources associated with industrial and commercial land use development that could result in TAC exposure to existing or future planned sensitive land uses. However, the General Plan Update includes policies focused specifically on addressing exposure of sensitive receptors to TACs. Notable policies are listed here:

- **RC-5.1 Pollutant Sources**. Minimize increases of new air pollutant emissions in the city and encourage the use of advance control technologies and clean manufacturing techniques.
- RC-5.2 Air Quality Land Use Compatibility. Avoid siting of homes, schools, hospitals, and childcare facilities and land uses within 500 feet of land uses that are considered large emitters.
- RC-5.3 Barriers and Buffers. Require design features such as site and building orientation, trees or other landscaped barriers, artificial barriers, ventilation and filtration, construction, and operational practices to reduce air quality impacts during construction and operation of large stationary and mobile sources.
- **RC-5.4 Health Risk Assessment.** Consider the health impacts of development of sensitive receptors within 500 feet of a freeway, rail line, arterial, collector or transit corridor sources using health risk assessments to understand potential impacts.
- RC-5.5 Community Benefit Plan. Require that any land use generating or accommodating more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week, provide a community benefit plan demonstrating an offset to community impacts of the truck traffic.
- RC-5.6 New Sensitive Receptors Near Existing Industrial Uses. Avoid placing homes, schools, hospitals, and childcare facilities within 1,000 feet of a land use that accommodates more than 100 trucks per day, more than 40 trucks with operating TRUs per day, or where TRU unit operations exceed 300 hours per week.

- RC-5.7 New Localized Air Pollution Sources Near Existing Sensitive Receptors. Avoid placing land uses that accommodate more than 100 trucks per day, more than 40 trucks with operating TRUs per day, or where TRU unit operations exceed 300 hours per week within 1,000 feet of homes, schools, hospitals, and childcare facilities.
- RC-5.8 Truck Hook-Ups at New Industrial or Commercial Developments. Require new industrial or commercial developments at which heavy-duty diesel trucks idle on-site to install electric truck hook-ups in docks, bays, and parking areas.
- RC-5.9 Clean and Green Industry. Prioritize non-polluting industries and companies using zero or low air pollution technologies.
- **RC-5.10 Dust and Odor.** Require new construction to include measures to minimize dust and odor during construction and operation.

Additionally, the General Plan Work Plan includes action items aimed at minimizing TAC impacts. The City would avoid locating new development with sensitive receptors within 500 feet of a freeway or roadway with over 100,000 AADT. If avoidance is not feasible, development with sensitive receptors may be located within 500 feet of a major roadway only if the applicant first prepares a project-specific HRA addressing potential health risks to sensitive receptors from exposure to TAC emissions. The HRA must be conducted in accordance with guidance and approval from South Coast AQMD. Feasible measures shall be implemented to reduce health risks from TAC exposure to levels determined by the HRA. The City would also update its development code to require applicants to install air filters with a minimum efficiency reporting value of 13 or greater (as defined by ASHRAE standard 52.2 or newer) in all buildings proposed for sensitive uses (e.g., residences, schools, offices, medical facilities).

Further, new stationary TAC sources would be subject to South Coast AQMD Rule 1401 and would be required to install best available control technology for toxics to receive permitting for the source. New stationary TAC sources that do not meet the requirements of Rule 1401 would not receive permits and would not ultimately be approved for development, ensuring receptors would not be exposed to substantial concentrations of TACs.

Summary

As discussed above, implementation of the General Plan Update could result in exposure of sensitive receptors to construction-related TACs. However, given that future development under the General Plan Update would occur by 2040 and would occur in various areas throughout the city, it is unlikely that any one sensitive receptor would be exposed to construction-related TACs for extended periods of time. Therefore, construction activity as a result of the General Plan Update would not result in the exposure of existing or new sensitive receptors to a substantial increase in TAC emissions. The General Plan Update would also result in an increase in total VMT along local roadways within the city as a result of future growth and development. Because there are roads in and around the city that exceed 100,000 vehicles per day, new sensitive receptors could be exposed to roadway traffic levels that could result in adverse health effects from TACs. However, the General Plan includes policies and action items that would minimize TAC impacts to the extent feasible. Regarding stationary sources of TACs, as discussed above, the General Plan Update includes policies that would limit exposure of new sensitive receptors to TACs from stationary sources such as industrial land uses. Additionally, all new development undergoing discretionary review would be required to

evaluate existing TAC exposure and incorporate available reduction measures in accordance with SCAQMD requirements. However, it cannot be guaranteed that emissions of TACs and associated health risk would be reduced to an acceptable level for individual projects. In consideration of these factors, implementation of the General Plan Update could result in the exposure of new sensitive receptors to a substantial increase in TAC emissions.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-5 would be potentially significant.

Mitigation Measures

No additional feasible mitigation measures are available.

Level of Significance After Mitigation: Impact 5.3-5 would significant and unavoidable.

Impact 5.3-6: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. [Threshold AQ-4]

Future development and other physical changes that could occur as a result of General Plan Update implementation could expose sensitive receptors to future development that could include odor sources and may cause a nuisance. Additionally, new sensitive receptors could be exposed to existing land uses that include odors and may result in a nuisance impact. The occurrence and severity of odors impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress among the public, and they often generate citizen complaints to local governments and regulatory agencies. South Coast AQMD Rule 402 states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." Enforcement of Rule 402 would serve to mitigate new odorgenerating land uses developed as a result of the General Plan Update that may cause a nuisance to nearby sensitive receptors.

Minor odors from the use of heavy-duty diesel-powered equipment and the laying of asphalt during construction activities would be intermittent and temporary. Due to the characteristics of diesel exhaust emissions, odors generated from the use of heavy-duty diesel-powered equipment would dissipate rapidly within 150 meters (492 feet) (Zhu et al. 2002a, 2002b). While construction would occur intermittently through the General Plan planning horizon, these types of odor-generating activities would not occur at any single location or within proximity to the same off-site receptors for an extended period of time and would not result in permanent odor sources. Therefore, construction is not anticipated to result in substantial odors.

Future nonresidential land uses or specific facilities in the city could generate odor emissions that could be a nuisance. Specifically, industrial land uses have the potential to generate objectionable odors. Examples of industrial projects are small-scale breweries, light industrial research parks, logistics centers, heavy manufacturing, and machining operations. Other sources of odors could include paint/coating operations (e.g., auto body shops), chemical manufacturing, and food manufacturing facilities. Areas where these types of uses could be developed under the General Plan Update would be generally limited to the Neo-Industrial or Industrial Employment Districts in the southeast portion of the city. Stand-alone residential uses would not be permitted in these districts. Industrial land uses associated with the General Plan Update would be south Coast AQMD Rule 402.

In addition, the Land Use and Community Character Element of the General Plan includes land use compatibility policies that would serve to reduce potential impacts from receptors near existing odors sources. Policy LC-1.11 allows flexibility in density and intensity to address specific site conditions and ensure compatibility of new development with adjacent context. Policy LC-7.4 would discourage large industrial projects within 1,000 feet of existing and planned residential development. In addition, the policies listed under Impact 5.3-5 would also serve to minimize odor impacts. As a result, implementation of the General Plan Update would not result in odor impacts on existing sensitive receptors or future sensitive receptors.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.3-6 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.3-6 would be less than significant.

5.3.5 CUMULATIVE IMPACTS

In accordance with South Coast AQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Consistent with the methodology, projects that do not exceed the regional significance thresholds would not result in significant cumulative impacts. Cumulative projects in the local area include new development and general growth in the Plan Area. Future projects would comply with local, regional, state, and federal regulations, including the proposed policies of the General Plan. However, because the timing of construction projects is not known at this time, construction emissions from future development within the city or the region could combine to exceed South Coast AQMD thresholds. Further, operation of future development under the General Plan Update could combine with other development in the region to result in a cumulatively considerable contribution to regional criteria air pollutants and ozone precursors. Therefore, the General Plan Update's contribution to air quality impacts would be cumulatively considerable and significant and unavoidable.

5.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.3-1 and 5.3-4.

Without mitigation, these impacts would be **potentially significant**:

- Impact 5.3-2 Construction-generated air pollutants would exceed South Coast AQMD thresholds.
- Impact 5.3-3 Long-term air pollutants would exceed South Coast AQMD thresholds.
- Impact 5.3-5 The proposed project would expose sensitive receptors to substantial increases in toxic air contaminants.

5.3.7 MITIGATION MEASURES

Impact 5.3-2, Impact 5.3-3, and Impact 5.3-5

No additional feasible mitigation measures are available.

5.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact 5.3-2

Implementation of standard conditions of approval 5.3-1 through 5.3-4 would reduce impacts to air quality to the extent feasible because construction-related emissions of criteria air pollutants and precursors would be minimized through the use of the highest rated diesel engines available for heavy-duty, off-road equipment; dust suppression techniques; the idling limits for heavy-duty diesel-powered equipment; and the use of alternatively fueled construction equipment. However, it cannot be determined with certainty if future construction emissions from individual discretionary projects would be reduced to below South Coast AQMD thresholds.

Because the SoCAB is in nonattainment for California and National AAQS for ozone and PM₂₅ and for the California AAQS for PM₁₀, construction emissions under the General Plan Update could exacerbate this existing air quality condition. Additionally, because it is unknown how many development projects could be under construction at the same time, emissions in the city could continue to exceed South Coast AQMD's thresholds. Therefore, because ozone precursors and particulate matter emissions could remain above recommended thresholds and the SoCAB is in nonattainment for these pollutants, this impact would be significant and unavoidable.

Impact 5.3-3

The General Plan Update policies described above require implementation of all feasible mitigation measures for all discretionary development projects. While individual projects may be able to reduce emissions to levels below applicable thresholds, the total emissions attributable to future development under the General Plan Update would exceed South Coast

AQMD's thresholds and would be a considerable contribution to cumulative air pollutants in the region. Notably, VOC emissions from consumer products and CO emissions from landscaping equipment are the highest contributors to emissions of those pollutants based on modeling conducted. These emissions are dependent on residents' individual choices, and the City has limited ability to mandate behavior changes to reduce such impacts. Therefore, no additional feasible mitigation is available to reduce this impact. Therefore, impacts would remain significant and unavoidable.

Impact 5.3-5

The General Plan Update policies described above require implementation of all feasible mitigation measures for all discretionary development projects. The ability of individual projects to mitigate their TAC impacts to a less than significant level is not known at this time. No additional feasible mitigation is available to reduce this impact. Therefore, impacts would remain significant and unavoidable.

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5.4 BIOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Rancho Cucamonga General Plan Update to impact biological resources in the City of Rancho Cucamonga and its sphere of influence (SOI). Cumulative impacts related to biological resources are in the City and SOI boundaries, but they consider regional habitat loss in the southern California region based on the range of protected species. The study area for biological resources includes the following eight US Geological Survey quadrangles, which encompass the City of Rancho Cucamonga and its SOI: Mount Baldy, Cucamonga Peak, Devore, Ontario, Guasti, Fontana, Prado Dam, Corona North, and Riverside West. The analysis in this section is based in part on:

 City of Rancho Cucamonga General Plan Update: PLAN RC Biological Resources Existing Conditions Report, June 2020

A complete copy of this study is included as Appendix 2-1 to this DEIR.

Chapter Overview

Rancho Cucamonga is an urbanized city and provides minimal habitat value for sensitive and special status species since urbanized areas typically do not have the potential to support biological resources. However, several special plant and animal species have been identified in the city and the SOI, such as in northern portion of the city in the foothills of the Angeles and San Bernardino National Forests, and could be impacted with the buildout of the General Plan Update. Development on vacant urban land and agricultural land in the city and SOI under the General Plan Update could potentially include sensitive biological resources and previously undisturbed habitats, and could result in habitat fragmentation and constrain wildlife movement that has regional significance.

This chapter concludes that compliance with local and regional ordinances and the City Municipal Code, and implementation of standard conditions of approval would protect these resources. In addition, the General Plan's Resource Conservation Element identifies policies to reduce impacts on Rancho Cucamonga's biological resources and encourages the preservation of sensitive vegetation and/or habitats, the expansion of sensitive biological preserve areas, and the creation of wildlife corridors. Thus, future development under the General Plan Update would be required to comply with applicable policies governing biological resources

Heart of the Matter

While much of the city is urbanized, protected species habitat for several plant and animal species are known to occur within the General Plan Area. The northern edge of the city plays an important role in connecting two expansive areas of the Angeles and San Bernardino National Forests. This mountainous area and its associated foothills include corridors, drainages, and open areas attractive to wildlife. Since regional connectivity between habitats is essential to the well-being of local wildlife, any future development in the northern portion of the city would consider and protect the regional flow of wildlife. In addition, the urban forest and trees would be essential to migratory birds, raptors, songbirds, and mammals.

5.4.1 ENVIRONMENTAL SETTING

5.4.1.1 Regulatory Background

Federal Regulations

Federal Endangered Species Act

The federal Endangered Species Act (FESA) protects endangered and threatened species (federally listed species). The FESA operates in conjunction with the National Environmental Policy Act to help protect the species themselves and the ecosystems that endangered and threatened species depend on. Under the FESA, a species listed as federally endangered is one facing extinction throughout all or a significant portion of its geographic range. A species listed as threatened is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Section 9 of the FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 US Code § 1532[19]). "Harm" is defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR [Code of Federal Regulations] § 17.3). "Harassment" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR § 17.3). Actions that result in take can result in civil or criminal penalties.

The US Fish and Wildlife Service (USFWS) is authorized under the FESA to issue permits under Sections 7 and 10 of that Act. Section 7 mandates that all federal agencies consult with the USFWS for terrestrial species and/or National Marine Fisheries Service for marine species to ensure that federal agency actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. Any anticipated adverse effects require preparation of a biological assessment to determine potential effects of a proposed project on listed species and critical habitat. "Critical habitat" is defined in the FESA as specific geographic areas that contain features essential to the conservation of an endangered or threatened species. If a project adversely affects a listed species or its habitat, the USFWS or National Marine Fisheries Service prepares a "biological opinion." The biological opinion may recommend alternatives to the project to avoid jeopardizing or adversely modifying habitat, including take limits. Critical habitat requirements do not apply to activities on private land that do not involve a federal nexus.

Section 10 of the FESA includes provisions to authorize a take of an endangered or threatened wildlife species that is incidental to, but not the purpose of, activities that are otherwise lawful. Under Section 10(a)(1)(B), the USFWS may issue incidental take permits for take of FESA-listed species if the take is incidental and does not jeopardize the survival and recovery of the species.

Clean Water Act, Section 404

The Federal Water Pollution Control Act, known as the Clean Water Act (33 US Code §§ 1251 et seq.), is the principal federal statute for water quality protection. The Clean Water Act (CWA) requires each state to adopt water quality standards and, in certain cases, to submit those standards for approval by the US Environmental Protection Agency (EPA). For point-source

discharges to surface water, the CWA authorizes the EPA and/or approved states to administer the National Pollutant Discharge Elimination System program. CWA section 303(d) requires states to list surface waters not attaining (or not expected to attain) water quality standards after the application of technology-based effluent limits. Typically, states must prepare and implement a total maximum daily load for all waters on the CWA section 303(d) list of impaired waters.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) affirms and implements the United States' commitment to four international conventions—with Canada, Japan, Mexico, and Russia—to protect shared migratory bird resources. The MBTA governs the take, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these items, except under a valid permit or as permitted in the implementing regulations. USFWS administers permits to take migratory birds in accordance with the MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 US Code §§ 668–668c) prohibits anyone from "taking" bald eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs without a permit issued by the Secretary of the Interior. In 1962, Congress amended the act to cover golden eagles (*Aquila chrysaetos*). The act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The 1962 amendments included a specific exemption for possession of eagles for religious purposes of Native American tribes; however, an Indian Religious Permit is required.

On November 10, 2009, the USFWS implemented new rules under the existing Bald and Golden Eagle Protection Act, requiring USFWS permits for all activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity. Under USFWS rules (16 US Code § 22.3; 72 Federal Register 31,132, June 5, 2007), "disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

State Regulations

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which states that "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved." The CESA prohibits the "taking" of listed species except as otherwise provided in state law. Section 86 of the Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Under certain circumstances, the CESA applies these take prohibitions to candidates for listing. State lead agencies (defined in CEQA § 21067) are required to consult with the CDFW to ensure that any action or project is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat. Additionally, the CDFW encourages informal consultation on any proposed project that may impact a candidate species. The CESA requires CDFW to maintain a list of threatened and endangered species. The CDFW also maintains a list of candidates for listing and of species of special concern (or watch list species).

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy; a threatened species as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management; and a rare species as one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species apply primarily to California native plants.

Fully Protected Species Act

The California Fish and Game Code provides protection from take for a variety of species, referred to as fully protected species. Except for take related to scientific research, all take of fully protected species is prohibited. Section 5050 lists protected amphibians and reptiles, and Section 3515 prohibits take of fully protected fish species. Eggs and nests of fully protected birds are under Section 3511. Migratory nongame birds are protected under Section 3800, and mammals are protected under Section 4700.

Nesting Birds and Raptors

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 specifically provides protection for all birds of prey, including their eggs and nests.

Migratory Bird Protection

Take or possession any migratory nongame bird, as designated in the MBTA, is prohibited by Section 3513 of the Fish and Game Code.

Streambed Alteration Permits

California Fish and Game Code Sections 1601 to 1607 prohibit alteration of any lake or streambed under CDFW jurisdiction, including intermittent and seasonal channels and many artificial channels, without execution of a Lake and Streambed Alteration Agreement through CDFW. This applies to any channel modifications that would be required to meet drainage, transportation, or flood control objectives.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code §§ 1900–1913) directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protected endangered and rare plants from take. The NPPA thus includes measures to preserve, protect, and enhance rare and endangered native plants.

CESA has largely superseded NPPA for all plants designated endangered by the NPPA. The NPPA nevertheless provides limitations on take of rare and endangered species: "...no person will import into this state, or take, possess, or sell within this state" any rare or endangered native plant, except in compliance with provisions of the CESA (14 CCR § 783.1). Individual land owners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

Inventory of Rare and Endangered Plants

Operating under a Memorandum of Understanding with the CDFW, the California Native Plant Society (CNPS) maintains an inventory of plants believed or known to be rare in California. This list includes species not protected under federal or state endangered species legislation. Plants in the inventory are assigned a "rare plant rank." The major categories of plants under the CNPS scheme are:

- List 1A, Plants presumed extinct.
- List 1B, Plants rare, threatened, or endangered in California and elsewhere.
- List 2, Plants rare, threatened, or endangered in California, but more numerous elsewhere.
- List 3, A review list of plants for which the CNPS requires more information.
- List 4, A watch list of plants of limited distribution.

Plants on CNPS List 1 or 2 generally meet the CEQA Section 15380 definitions of rare or endangered. These plants also meet the definitions of CESA and are eligible for state listing.

California Desert Native Plants Act

The California Desert Native Plants Act protects unlisted California desert native plants from unlawful harvesting on public and private lands in the counties of Riverside, San Bernardino, Imperial, Inyo, Kern, Los Angeles, Mono, and San Diego (California Food and Agriculture Code, §§ 80001–80006, Division 23). A wide range of desert plants are protected under this act, including all species in the agave and cactus families. Harvest, transport, sale, or possession of specific native desert plants is prohibited without a valid permit or wood receipt and the

required tags and seals. Plants listed rare, endangered, or threatened under federal or state law or regulations are excluded from this provision. The act was taken into consideration in this evaluation due to the presence of both Joshua trees (agave family) and cacti in the city and SOI.

California Porter-Cologne Water Quality Control Act

The State Water Resources Control Board and nine Regional Water Quality Control Boards (RWQCB) implement many of the CWA's provisions. The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation in California, establishing a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution.

The Porter-Cologne Act implements many provisions of the CWA. Section 401 of the CWA gives the State Water Board the authority to review any proposed federally permitted or federally licensed activity that may impact water quality and to certify, condition, or deny the activity if it does not comply with state water quality standards. If the State Water Board imposes a condition on its certification, those conditions must be included in the federal permit or license.

The RWQCB regulates discharge of waste in any region that could affect the waters of the State and waters of the United States under the Porter-Cologne Act and the CWA. Under the Porter-Cologne Act, a report of waste discharge must be submitted prior to discharging or proposing to discharge waste in any region that could affect the quality of the waters of the State (California Water Code § 13260). Waste discharge requirements or a waiver of those requirements will be issued by the RWQCB. Waters of the State are defined as any surface water or groundwater, including saline waters, that are within the boundaries of the state (Public Resource Code § 71200). This differs from the CWA definition of waters of the United States by its inclusion of groundwater and waters outside the ordinary high-water mark in its jurisdiction.

Regional Regulations

County of San Bernardino

Title 8, Division 8, Chapter 88.01: Plant Protection and Management, of the County of San Bernardino's Code of Ordinances includes regulations and guidelines for managing plant resources within private or publicly owned unincorporated areas of the county. Removal of regulated trees and plant are described in Section 88.01.070(b), Regulated Trees, and Section 88.010.080(b), Regulated Riparian Plants. Protected trees include:

- 1. Any living, native tree with a 6-inch or greater stem diameter or 19 inches in circumference measured 4.5 feet above natural grade level.
- 2. Three or more palm trees in linear plantings that are 50 feet or greater in length within established windrows or parkway plantings.

Regulated riparian plants include those on private or publicly owned land in unincorporated areas, unless exempt. Additionally, Section 88.01.080(b) applies to vegetation removal within 200 feet of a streambank or in an area identified as a protected riparian area on an overlay map or Specific Plan (San Bernardino County 2021).

Local Regulations

Rancho Cucamonga 2010 General Plan

The City's current General Plan was adopted in 2010. Chapter 2, "Managing Land Use, Community Design, and Historic Resources," as well as Chapter 6, "Resource Conservation," include goals and policies established to preserve, protect, conserve, replenish, and guide the efficient use of Rancho Cucamonga's local natural resources. These natural resources include agricultural lands, open space, sensitive habitat, and sensitive plant and animal species. Additionally, the "Wildlife Resources" section of the Resource Conservation chapter of the General Plan identifies wildlife resources as consisting of "all of the plants and wildlife species located in natural areas, particularly in the hillsides and open space areas" and that "with continued urban development in Rancho Cucamonga, it is important to plan for wildlife habitat areas identified in the Wildlife Resources section include alluvial fans, the Etiwanda fan, alluvial fan sage scrub, and riparian and wetland areas.

Rancho Cucamonga Municipal Code: Tree Preservation Regulations

Section 17.80, Tree Preservation, of the Rancho Cucamonga Municipal Code protects trees that are community resources from indiscriminate cutting or removal. This provision specifically intends to expand eucalyptus windrows that provide a cumulative value as a windbreak system by protecting selected blue gum eucalyptus windrows and by planting new spotted gum eucalyptus windrows along the established grid pattern as development occurs. General provisions in this section address pruning of trees overhanging a street, nuisance trees, credit given for tree preservation, the conflict between structures and protected trees, and the use of explosives to remove trees. Section 17.80.040, Tree replacement policy, states that where existing eucalyptus windrows are to be removed, they shall be replaced with spotted gum eucalyptus (Eucalyptus maculata), Eucalyptus nicholii, or other approved eucalyptus species. Other heritage tree removal shall require replacement with the largest nursery-grown tree available and, if possible, relocation of the heritage tree to another location on the site would be preferred. Additionally, Section 17.80.050, Protection of existing trees, includes protection measures to ensure that no damage occurs to preserved trees, and Section 17.80.060, Tree maintenance, identifies responsibilities for proper maintenance, irrigation, pruning, and fertilization of existing or newly planted trees.

Under Section 17.16.080, Tree removal permit, of the City's Development Code, an individual or corporation may not remove a heritage tree without obtaining a tree removal permit. A heritage tree is defined as any tree that meets at least one of the following criteria:

- All eucalyptus windrows.
- Any tree in excess of 30 feet in height and having a single trunk diameter of 20 inches or more as measured 4.5 feet from ground level.

- Multitrunk trees with a total diameter of 30 inches or more as measured at 4.5 from ground level.
- A stand of trees whose nature makes each dependent on the others for survival.
- Any other tree deemed historically or culturally significant by the planning director because of age, size, condition, location, or aesthetic qualities.

Standard Conditions of Approval

There are existing regulations that are intended to protect biological resources. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for impacts on biological resources in the City.

- 5.4-1: Special status plant and wildlife species have the potential to occur within the proposed General Plan Update Study Area. Any project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City, consistent with its performance criteria of mitigating lost habitat at a ratio no less than one to one (one acre restored for every acre impacted).
- 5.4-2: Any project within the proposed General Plan Update Study Area that impacts a Federally listed species, based on a biological survey or other analysis of the project, shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- 5.4-3: Any project within the proposed General Plan Update Study Area that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed

species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the 2080 CESA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Wildlife and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3)site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- 5.4-4: To avoid conflicts with the Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a preconstruction survey (or possibly multiple surveys) by a qualified biologist is recommended prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the pre-construction survey and any subsequent monitoring shall be provided to the California Department of Fish and Wildlife and the City.
- 5.4-5: A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- 5.4-6: The Porter-Cologne Act and Sections 1600 to 1616 of the California Fish and Game Code protect "waters of the State." Agreements (Streambed Alteration Agreements) from the California Department of Fish and Wildlife (CDFW) shall be required for impacts on areas in CDFW's jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFW resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFW requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFW, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- 5.4-7: The City of Rancho Cucamonga shall require a habitat connectivity/wildlife corridor evaluation for future development projects that may impact existing connectivity areas and wildlife linkages identified in Figure 5.4-6, *Wildlife Movement Linkages Map*. The results of the evaluation shall be incorporated into the project's biological report required under standard condition of approval 5.4-1. The evaluation shall also identify project design features that would reduce potential impacts and maintain habitat and wildlife movement. To this end, the City shall incorporate the following measures, to the extent practicable, for projects impacting wildlife movement corridors:
 - Adhere to low density zoning standards
 - Encourage clustering of development
 - Avoid known sensitive biological resources
 - Provide shielded lighting adjacent to sensitive habitat areas
 - Encourage development plans that maximize wildlife movement
 - Provide buffers between development and wetland/riparian areas
 - Protect wetland/riparian areas through regulatory agency permitting process
 - Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries
 - Encourage preservation of native habitat on the undeveloped remainder of developed parcels
 - Minimize road/driveway development to help prevent loss of habitat due to roadkill and habitat loss
 - Use native, drought-resistant plant species in landscape design
 - Encourage participation in local/regional recreational trail design efforts

5.4.1.2 Existing Conditions

General Site Conditions

The City of Rancho Cucamonga's General Plan Area and SOI are within the US Geological Survey's Mount Baldy, Cucamonga Peak, Devore, Ontario, and Guasti 7.5-minute quadrangles, which cover approximately 50 to 70 square miles. The city is within and adjacent to the foothills of the eastern end of the San Gabriel Mountains and west of the San Bernardino Mountains, and the city's SOI abuts the San Bernardino National Forest to the north.

Topography

Topographically, Rancho Cucamonga slopes to the south from the northern San Gabriel Mountain foothills. Elevations at the northern edge of the city's SOI are approximately 5,200 feet above mean sea level, and elevations in the city range from 1,018 to 1,600 feet above mean sea level. Elevations increase north of the SOI at Cucamonga Peak, Bighorn Peak, Ontario Peak, Sugarloaf Peak, and Mount Baldy. In the General Plan Area, streams in the Santa Ana Watershed drain from the north. and Cucamonga Creek runs along the western edge. Other creeks flow through the city, including Deer Creek, Day Creek, and Etiwanda Creek.

Conservation Areas

Four conservation areas currently exist in the project area and are already protected from development by the recordation of conservation deed restrictions as well as conservation management plans:

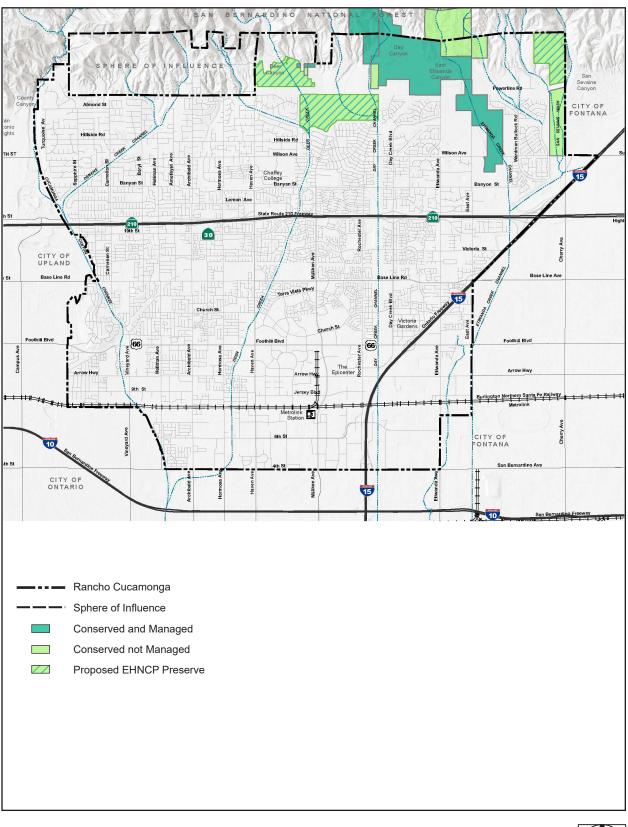
- 760-acre North Etiwanda Preserve
- 137-acre San Sevaine Spreading Grounds
- 880-acre US Forest Service Conservation Area
- 35-acre conservation area purchased as mitigation and set aside through a conservation easement to the San Bernardino County CSA 70 (10/2003)

These areas intended to protect alluvial fan sage scrub, sycamore alluvial woodland, California walnut woodland, and freshwater marsh. These areas encompass 1,812 acres of habitat, and their protection is critical to the survival of sensitive species and wildlife occupying these habitats. They also provide important habitat and migration corridors for wildlife, ecosystem services, and recreational resources for the public. Figure 5.4-1, *Conservation Areas Map*, shows the existing and proposed conservation areas in the city and SOI.

Etiwanda Heights Neighborhood and Conservation Plan. The EHNCP, adopted in October 2019, establishes three new conservation areas between the northern portion of the city and the San Bernardino National Forest. The EHNCP articulated a vision for the conservation of the alluvial fans, foothills, and drainage areas in the unincorporated foothills above the neighborhoods of Etiwanda through annexation of this land, which is currently in the City's SOI but governed by the County of San Bernardino. Guiding principles of the EHNCP include maintaining control of the land, conserving open space, providing opportunities for active healthy living, maintaining fiscal responsibility, providing public safety, and creating a unique sense of place. The intent of the EHNCP is to transform the conservation areas from areas of threatened habitat and rural open space that are only

partially conserved, to permanently conserved areas with well-managed habitat and small rural development in harmony with nature (Rancho Cucamonga 2019, 2020).

Figure 5.4-1 - Conservation Areas Map 5. Environmental Analysis



Source: City of Rancho Cucamonga, 2020

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Scale (Miles)

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Critical Habitat

The USFWS designates critical habitat for listed endangered or threatened species of flora and fauna. Critical habitat is defined in FESA as habitat deemed essential to the survival of a federally listed species. Seven animals and one plant that have been designated federal endangered (FE), federal threatened (FT), and/or state endangered (SE) have designated critical habitat areas in the vicinity of the study area, as identified on Figure 5.4-2, *Designated Critical Habitat in the City and SOI*. Critical habitat for the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) (FE, SSC) has been designated within or adjacent to the study area.

Special Status Species

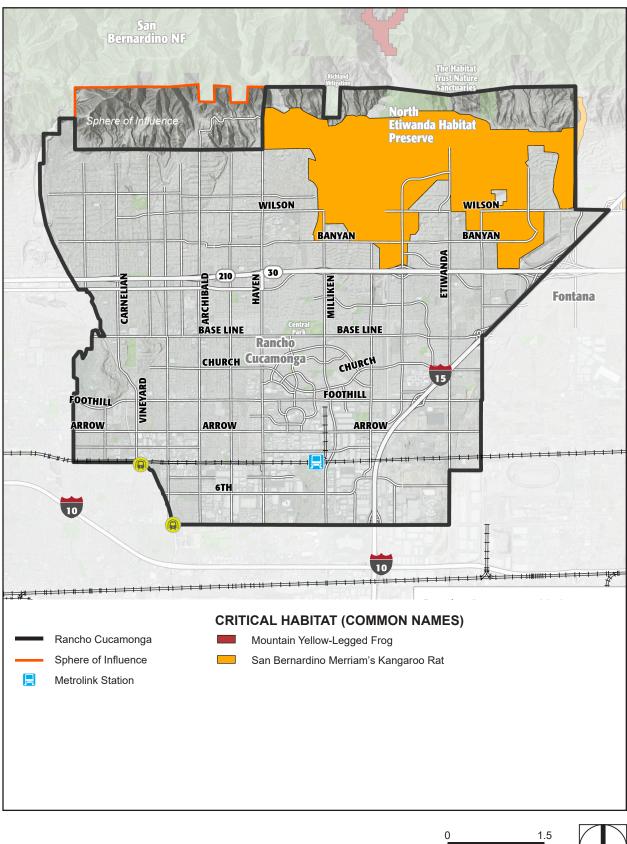
Special status plant and animal species in the General Plan Area could be affected by future development. The presence of a listed species and/or the habitat suitable for a listed species is typically sufficient to require additional biological analysis. The analysis must follow protocols pursuant to the applicable regulatory agency or agencies or the results would be considered inadequate. The protocol requires investigation during different season(s) or over several season for particular species.

The CDFW defines special status animals, plants, and communities as those where at least one of the following conditions applies (CDFW 2017):

- Officially listed or proposed for listing under the state and/or federal ESA.
- Considered by the CDFW to be a Species of Special Concern (SSC).
- Listed by the CNPS with a Rare Plant Rank (RPR).
- Included on other lists, such as Riverside County.
- Taxa (groups of one or more populations of an organism or organisms considered by taxonomists to form a unit) that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the California Environmental Quality Act Guidelines.
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range but not currently threatened with extirpation.
- Population(s) in California that may be peripheral to the major portion of a taxon's range but are threatened with extirpation in California.
- Taxa closely associated with a habitat that is declining in California at a significant rate (wetlands, riparian, vernal pools, old growth forests, desert aquatic systems, native grasslands, valley shrubland habitats, etc.).
- Taxa designated as a special status, sensitive, or declining species by other state or federal agencies or a nongovernmental organization and determined by the state to be rare, restricted, declining, or threatened across their range in California.

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Figure 5.4-2 - Designated Critical Habitat in the City and SOI 5. Environmental Analysis



Source: ECOS/USFWS Threatened & Endangered Species Active Critical Habitat Report, U.S. Fish and Wildlife Service, 2021; City of Rancho Cucamonga, 2020; ESRI, 2021

Scale (Miles)

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Special Status Plants

A review of the California Natural Diversity Database (CNDDB) and the CNPS Rare Plant Inventory identified 61 special status species that may occur in the city or SOI (see Table 5.4-1, Special Status Plant Species with Records in the Study Area, and Figure 5.4-3a, California Natural Diversity Database Records in the Region - Plants).

		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Acanthoscyphus parishii var. parishii (Parish's oxytheca)	Sandy or gravelly, chaparral, and lower montane coniferous forest. 1220– 2600 meters. ²	-	-	4.2	Reported in the vicinity of Mt. Baldy and Cucamonga Peak (CNPS 2020)	-
Amaranthus watsonii (Watson's amaranth)	Mojavean desert scrub and sonoran desert scrub. 20–1700 m. ²	-	-	4.3	Reported in the vicinity of Mt. Baldy (CNPS 2020)	-
Ambrosia monogyra (singlewhorl burrobrush)	Sandy, chaparral, sonoran desert scrub. 10–500 m. ²	-	-	2B.2	Historically reported near Fontana Power Plant near Rialto (1947 and 1961 record); Reported in the vicinity of Devore (CNPS 2020)	-
<i>Ambrosia pumila</i> (San Diego ambrosia)	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3– 580 m. ¹	FE	-	1B.1	Reported near Alberhill, approximately 30 miles from the city (CNPS 2020).	Not in final Critical Habitat (USFWS 2020)

Table 5.4-1 Special Status Plant Species with Records in the Study Area

		Status (USFWS/CDFW)			Relationship	
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Arctostaphylos glandulosa ssp. gabrielensis (San Gabriel manzanita)	Perennial evergreen shrub. 595–1500 m.²	-	-	1B.2	Reported near Mt. Baldy and Cucamonga Peak. Known only from Mill Creek Summit divide in the San Gabriel Mountains (CNPS 2020)	-
Asplenium vespertinum (western spleenwort)	Rocky areas in chaparral, cismontane woodland and coastal scrub. Sometimes the base of overhanging boulders. 180– 1,000 m. ²	-	-	4.2	Reported near Mt. Baldy and Cucamonga Peak (CNPS 2020)	
Astragalus bicristatus (crested milk-vetch)	Sandy or rocky, mostly carbonate, lower montane coniferous forest, upper montane coniferous forest. 1700– 2745 m.	-	-	4.3	Reported in the vicinity of Mt. Baldy (CNPS 2020)	
Astragalus brauntonii (Braunton's milk- vetch)	Chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3–640 m. ¹	FE	_	1B.1	Reported near Azusa, approximately 18 miles from the City (CNPS 2020).	Not in final Critical Habitat (USFWS 2020)

		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Atriplex coulteri (Coulter's saltbush)	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2–460 m.	-	-	1B.2	Reported in Chino Creek, south of Ontario (1917 record; CNPS 2020)	-
Berberis nevinii (Nevin's barberry)	Sandy or gravelly, chaparral, cismontane woodland, coastal scrub, and riparian scrub. 70–825 m. ²	FE	SE	1B.1	Reported near Mt. Baldy (1997 record; CNPS 2020)	Not in final Critical Habitat (USFWS 2020)
Calochortus catalinae (Catalina mariposa lily)	Often occurring in heavy soil in open grassland or scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 15– 700 m. ²	-	-	4.2	Reported in the vicinity of Ontario and Guasti (CNPS 2020)	
Calochortus clavatus var. gracilis (slender mariposa lily)	Chaparral, coastal scrub, and valley and foothill grassland. 302– 1000 m. ²	-	-	1B.2	Historically reported at Cobal Canyon (1999 record); Observed in Cattle Canyon (2013 record; CNPS 2020)	-
Calochortus plummerae Plummer's mariposa lily	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and	-	-	4.2	Reported in the vicinity of Mt. Baldy, Cucamonga Peak, and Devore (CNPS 2020)	-

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		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
	sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60–2,500 m. ¹					
Calystegia felix (lucky morning- glory)	Meadows and seeps, riparian scrub. Sometimes alkaline, alluvial. 30–215 m.	-	-	1B.1	Reported in west Chino (2013 record; CNPS 2020)	-
Centromadia pungens ssp.laevis (smooth tarplant)	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5–1,170 m. ¹	-	-	1B.1	Reported near San Bernardino, approximately 17 miles from the City; many historical occurrences may be extirpated (CNPS 2020)	-
Chorizanthe leptotheca (Peninsular spineflower)	Sandy or gravelly soils. Often in alluvial fans with granitic soils. 300–1,900 m. ²	-	-	4.2	Reported in the vicinity of Mt. Baldy (CNPS 2020).	-
Chorizanthe parryi var. parryi (Parry's spineflower)	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland.	-	-	1B.1	Reported in the City of Rancho Cucamonga and in Devore (1998 record; 1999 record; CNPS 2020)	-

		Status (USFWS/	CDFW)		Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
	Dry, sandy soils. 90–1,220 m.¹					
Chorizanthe xanti var. leucotheca (white-bracted spineflower)	Sandy or gravelly soils in Mojavean desert scrub, pinyon/juniper woodland, and alluvial fans within coastal scrub. 300– 1,200 m. ²	-	-	1B.2	Reported in the vicinity of Devore (1979 record; CNPS 2020)	-
Cladium californicum (California sawgrass)	Meadows and seeps, marshes and swamps, and alkaline or Freshwater. 60– 1,600 m. ²	_	-	2B.2	Historically reported in Red Hill, East of Upland (1918 record; CNPS 2020)	-
Claytonia lanceolata var. peirsonii (Peirson's spring beauty)	Scree, subalpine coniferous forest, and upper montane coniferous forest. 1,510– 2,745 m. ²	-	-	3.1	Reported near Bighorn Peak and Timber Mountain in Mt. Baldy (2012 record; CDFG 2009); Known only from the San Gabriel Mountains (CNPS 2020)	-
Deinandra paniculata (paniculate tarplant)	Usually in vernally mesic areas, often with sandy soils in coastal scrub, valley and foothill grassland, and vernal pools. Can also occur in open chaparral, woodland, and disturbed areas. 25–940 m. ²	-	-	4.2	Reported in the vicinity of Guasti (CNPS 2020)	-
Dodecahema leptoceras (slender-horned spineflower)	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	FE	SE	1B.1	Historically reported from the vicinity of Upland (1905 record; CDFG 2009)	No Critical Habitat has been published.

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		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200–765 m. ¹					
Dudleya multicaulis (many-stemmed dudleya)	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 15–790 m. ¹	-	_	1B.2	Historically reported in Marshall Creek near La Verne (1934); Reported in the vicinity of Mt. Baldy (CNPS 2020)	-
Eriastrum densifolium ssp. sanctorum (Santa Ana River woollystar)	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180–700 m. ¹	FE	SE	1B.1	Historically reported in the vicinity of Devore (1985 record); Reported in Fontana, approximately 9 miles from the City CNPS 2020)	No Critical Habitat has been published.
Eriogonum microthecum var. johnstonii (Johnston's buckwheat)	Rocky, subalpine coniferous forest, upper montane coniferous forest. 1,829– 2,926 m. ²	-	-	1B.3	Reported near Cucamonga Peak, less than 4 miles north of the SOI (CDFG 2009; CNPS 2020)	-
Eriogonum umbellatum var. minus (alpine sulfur- flowered buckwheat)	Gravelly, subalpine coniferous forest, upper montane coniferous forest. 1,800– 3,068 m. ²	-	-	4.3	Reported near Cucamonga Peak (CNPS 2020)	-
Galium angustifolium ssp.gabrielense (San Antonio Canyon	Granitic, sandy or rocky, chaparral, and lower montane coniferous	-	-	4.3	Reported in the vicinity of Cucamonga Peak and Mt.	-

		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Species Name bedstraw)	forest. 1,200–	USEVVS	CDFW	Скрк	Baldy (CNPS	Παριτατ
	2,650 m. ²				2020)	
Galium johnstonii (Johnston's bedstraw)	Chaparral, lower montane coniferous forest, pinyon and juniper woodland, and riparian woodland. 1,200–2,300 m. ²	-	-	4.3	Reported near Cucamonga Peak and Devore (CNPS 2020)	-
Heuchera caespitosa (urn-flowered alumroot)	Rocky, cismontane woodland, lower montane coniferous forest, riparian forest (montane), and upper montane coniferous forest. 1,155– 2,650 m. ²	-	_	4.3	Reported near Mt. Baldy and Cucamonga Peak (CNPS 2020)	
Horkelia cuneata ssp. puberula (mesa horkelia)	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15–1,645 m. ¹	-	-	1B.1	Historically reported in Upland and Etiwanda (1917 record; 1925 record); Reported in the vicinity of Cucamonga Peak and Ontario (CNPS 2020)	-
Juglans californica (Southern California black walnut)	Hillsides and canyons, usually with alluvial substrates in chaparral, cismontane woodland, coastal scrub, and riparian woodland. 50– 900 m. ²	-	-	4.2	Reported in Cucamonga Peak, Devore, and Ontario (CNPS 2020)	_

				CDFW)		Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Juncus duranii (Duran's rush)	Mesic, lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest. 1,768– 2,804 m. ²	-	-	4.3	Reported in Cucamonga Peak (CNPS 2020)	-
Lepechinia fragrans (fragrant pitcher sage)	Chaparral. 20– 1,310 m.²	-	-	4.2	Known in Santa Monica Mountains near Triunfo Pass; threatened in San Gabriel Mountains; Reported near Mt. Baldy and Cucamonga Peak (CNPS 2020)	-
Lepidium virginicum var. robinsonii (Robinson's pepper- grass)	Chaparral, coastal scrub. Dry soils, shrubland. 4– 1,435 m. ¹	-	-	4.3	Historically reported in the vicinity of Chino and Pomona (1936 record; 1926 record)	-
Lilium humboldtii ssp. ocellatum (ocellated Humboldt lily)	Openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland. 30– 1,800 m. ²	-	-	4.2	Reported in Mt. Baldy, Cucamonga Peak, and Devore (CNPS 2020)	-
Lilium parryi (lemon lily)	Mesic, lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. 1,220– 2,745 m. ²	-	-	1B.2	Historically reported near San Sevaine Cow Camp in Cucamonga Peak (1993 record; CNPS 2020)	-

		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
<i>Linanthus concinnus</i> (San Gabriel linanthus)	Rocky, openings, chaparral, lower montane coniferous forest, upper montane coniferous forest. 1,520– 2,800 m. ²	-	-	1B.2	Historically reported from Icehouse Canyon in Cucamonga Peak (2003 record; CNPS 2020)	-
<i>Lycium parishii</i> (Parish's desert- thorn)	Coastal scrub and sonoran desert scrub. 135–1,000 m. ²	-	-	2B.3	Historically reported north of San Bernardino (1885 record; CNPS 2020)	-
Malacothamnus parishii (Parish's bush- mallow)	Chaparral and coastal scrub. 305–455 m. ²	-	-	1A	Historically reported south of San Bernardino and Redlands (1895 record; CNPS 2020)	-
Monardella australis ssp. jokerstii (Jokerst's monardella)	Lower montane coniferous forest, chaparral. Steep scree or talus slopes between breccia. Secondary alluvial benches along drainages and washes. 1,350– 1,750 m. ¹	-	-	1B.1	Known only from the San Gabriel Mountains; Reported west of Day Creek on the south face of Cucamonga Peak (2006 record; CNPS 2020)	City – 2010 SOI – 2010
Monardella macrantha ssp. hallii (Hall's monardella)	Broadleafed upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland. Dry slopes and ridges in openings. 700– ,1770 m. ¹	-	-	1B.1	Historically reported near Sunset Peak (1991 record; CNPS 2020)	-

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		Status (USFWS/	CDFW)		Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Monardella saxicola (rock monardella)	Rocky, usually serpentinite, closed-cone coniferous forest, chaparral, and lower montane coniferous forest. 500– 1,800 m. ²	-	-	4.2	Reported near Mt. Baldy and Devore (CNPS 2020)	-
Muhlenbergia californica (California muhly)	Mesic, seeps and streambanks. Chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps. 100– 2,000 m. ²	-	_	4.3	Historically observed from Red Hill, east of Upland (1916 record; CNPS 2020)	-
Muhlenbergia utilis (aparejo grass)	Occurs usually in wetlands, occasionally in non-wetlands. Occurs in communities that include: Coastal Sage Scrub, Creosote Bush Scrub, wetland- riparian. ²	-	_	2B.2	Historically observed in Red Hill near Upland (1916 record)	
Navarretia prostrata (prostrate vernal pool navarretia)	Mesic. Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), and vernal pools. 3– 1,210 m. ²	-	-	1B.1	Historically observed from Red Hill (1917 record; CDFG 2009); Reported in Guasti (CNPS 2020)	-
Opuntia basilaris var. brachyclada (short-joint beavertail)	Chaparral, Joshua tree woodland, Mojavean desert scrub and pinyon and juniper woodland. 425– 1,800 m. ²	-	-	1B.2	Reported in Lytle Creek (1995 record; CNPS 2020)	_

		Status (USFWS/CDFW)				Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Oreonana vestita (woolly mountain- parsley)	Gravel or talus, lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest. 1,615– 3,500 m. ²	-	_	1B.3	Reported in Telegraph Wash near Cucamonga Peak (2006 record; CNPS 2020)	-
Orobanche valida ssp. valida (Rock Creek broomrape)	Granitic. Chaparral and pinyon and juniper woodland. 1,250–2,000 m. ²	-	-	1B.2	Reported near Lookout Mountain, north of the SOI (1995 record; CNPS 2020)	-
Phacelia mohavensis (Mojave phacelia)	Sandy or gravelly. Cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. 1,400–2,500 m. ²	-	-	4.3	Reported near Cucamonga Peak (CNPS 2020)	-
<i>Phacelia stellaris</i> (Brand's star phacelia)	Coastal scrub, coastal dunes. 1–400 m.²	-	-	1B.1	Reported in Rancho Cucamonga in Guasti (2003 record; CNPS 2020)	-
Pseudognaphalium leucocephalum (white rabbit- tobacco)	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 35–515 m. ¹	-	-	2B.2	Reported in Guasti and 2 miles northeast of La Verne in Ontario (CNPS 2020)	-
Quercus durata var. gabrielensis (San Gabriel oak)	Chaparral and cismontane woodland. 450– 1,000 m. ²	-	-	4.2	Known from the San Gabriel Mountains; Reported near Mount Baldy (CNPS 2020)	-

		Status (USFWS/	CDFW)		Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
Sagittaria sanfordii (Sanford's arrowhead)	Marshes and swamps (assorted shallow freshwater). 0– 650 m. ²	-	-	1B.2	Reported near Cucamonga Peak (2009 record; CNPS 2020)	-
Senecio astephanus (San Gabriel ragwort)	Rocky slopes, coastal bluff scrub, and chaparral. 400– 1,500 m. ²	-	-	4.3	Reported in Mt. Baldy and Devore (CNPS 2020)	-
Sidalcea neomexicana (salt spring checkerbloom)	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3– 2,380 m. ¹	-	_	2B.2	Historically reported from Claremont (1909 record); Presumed extirpated or uknown in Ontario (CNPS 2020)	
Sidotheca caryophylloides (chickweed oxytheca)	Lower montane coniferous forest (sandy). 1,114–2,600m. ²	-	-	4.3	Reported near Mt. Baldy (CNPS 2020)	-
Streptanthus bernardinus (Laguna Mountains jewelflower)	Chaparral and lower montane coniferous forest. 670– 2,500 m. ²	-	-	4.3	Reported in Lytle Creek, northeast of Cucamonga Peak and near Devore (1991 record; CNPS 2020).	-
Symphyotrichum defoliatum (San Bernardino aster)	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs;	-	_	1B.2	Historically observed in Red Hill and Chino (1916 record; CDFG 2009); Reported in Fontana (CNPS 2020)	_

		Status (USFWS/	CDFW)		Relationship
Species Name	Habitat	USFWS	CDFW	CRPR	Most Recent CBDDB Siting	of Plan Area to Critical Habitat
	disturbed areas. 2–2,040 m. ¹					
Symphyotrichum greatae (Greata's aster)	Mesic. Broad- leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. 300– 2,010 m. ²	-	_	1B.3	Historically reported from San Antonio Canyon in Mt. Baldy (1917 record; CDFG 2009; CNPS 2020)	-
Thysanocarpus rigidus (rigid fringepod)	Dry rocky slopes and pinyon and juniper woodland. 600– 2,200 m. ²	-	-	1B.2	Historically reported in Claremont (1923); Reported in Mt. Baldy (CNPS 2020)	-
Viola pinetorum ssp. grisea (grey-leaved violet)		-	-	1B.2	Reported between Bighorn Peak and Ontario Peak (2014 record; CNPS 2020)	-

Notes:

¹ Habitat descriptions were taken from the CNDDB General and Microhabitat descriptions.

² Species either not listed in CNDDB or has no observations recorded in CNDDB; habitat descriptions paraphrased from CNPS Rare Plant Inventory, the Jepson Manual, and CalFlora.

Other sources:

CNPS, Rare Plant Program, 2020, Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39), http://www.rareplants.cnps.org/

Federal Designations	State Designations
FE = Federally Endangered	SE = State Endangered
FT = Federally Threatened	ST = State Threatened
PT = Proposed Threatened under ESA	
California Native Plant Society (CNPS) Designations	- Indicated information that is not applicable to the species.
CRPR = California Rare Plant Rank	
1A: Presumed extinct in California	
1B: Rare, threatened, or endangered in California and elsewhere	
2: Rare, threatened, or endangered in California, but more common elsewhere	
3: More information needed (Review List)	
4: Limited distribution (Watch List)	
0.1: Seriously threatened in California	
0.2: Fairly threatened in California	
0.3: Not very threatened in California	

Source: Ecorp, 2020, Existing Conditions Report: Biological Resources, https://www.cityofrc.us/sites/default/files/2020-06/PlanRC_ExistingConditionsReport_BiologicalResources_June2020.pdf, accessed June 2, 2021.

Special Status Wildlife

A review of CNDDB identified species that may occur in the city or SOI shows that 45 special status wildlife species have CNDDB records in the study area, as shown in Table 5.4-2, *Special Status Wildlife Species in the Study Area* and Figure 5.4-3b, *California Natural Diversity Database Records in the Region – Animals*.Critical habitat for the San Bernardino kangaroo rat has been documented in the northeast portion of the SOI. A description of habitat requirements for these species has been included in Table 5.4-2.

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
Invertebrates					
Bombus crotchii (Crotch bumble bee)	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	-	Candidate	Reported in San Antonio Canyon, north of Ontario (1931 record); Also reported in San Bernardino, Devore, and Mt. Baldy (1945, 1953, and 1975 record)	-
Callophrys mossii hidakupa (San Gabriel Mountains elfin butterfly)	San Gabriel and San Bernardino mountains at elevations of 3,000 to approximately 5,500 ft. Foodplant is Sedum spathulifolium. Type locality is southern mixed evergreen forest.	-	-	Reported near Mt. Baldy (1975 and 1976 recods)	-
Diplectrona californica (California diplectronan caddisfly)	No information has been published on the larva of this species, but other larvae in the genus live in fast-flowing, cool streams.	-	-	Reported from Claremont (CDFG 2009)	-
Rhaphiomidas terminatus abdominalis (Delhi Sands flower-loving fly)	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties. Requires fine, sandy soils, often with	FE	-	Reported in Fontana, San Bernardino, and Guasti (CDFG 2009)	-

Table 5.4-2 Special Status \	Wildlife S	becies in	the Study Are	а
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			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
	wholly or partly consolidated dunes and sparse vegetation. Oviposition req. shade.				
Fish					
Gila orcuttii (arroyo chub)	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	-	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (2003 record)	-
Rhinichthys osculus ssp. (Santa Ana speckled dace)	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	-	SSC	Reported near Cajon Creek and Lytle Creek (1996 record)	-
Catostomus santaanae (Santa Ana sucker)	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble- boulder bottoms, cool, clear water, and algae.	FT	SSC	Reported from Cattle Canyon Creek and the East Fork of the San Gabriel River (2006 record)	
Amphibians					
Anaxyrus californicus (arroyo toad)	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of	FE	SSC	Reported along Cucamonga Creek (1999 record)	Not within final Critical Habitat (USFWS 2020)

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	Status Most Recent CNDDB Siting				Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
•	streams in drier parts of range.				
Batrachoseps gabrieli (San Gabriel Mountains slender salamander)	Known only from the San Gabriel Mtns. Found under rocks, wood, and fern fronds, and on soil at the base of talus slopes. Most active on the surface in winter and early spring.	-	-	Reported near Scotland and Lytle Creek (1998 record)	-
Rana boylii (foothill yellow- legged frog)	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	-	SSC	Reported in the vicinity of Evey, San Antonio, and Thompson Creeks in Claremont (1960 record)	-
Rana muscosa (southern mountain yellowlegged frog)	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2 – 4 years to complete their aquatic development.	FE	SE	Historically reported at various locations in Mt. Baldy (1959 record)	Not within final Critical habitat (USFWS 2020)
Spea hammondii western spadefoot ²	Occurs primarily in grassland habitats, but can be found in valley- foothill hardwood woodlands. Vernal pools are essential for breeding and egg- laying.	-	SSC	Reported 1.5 miles northwest of Claremont (1941 record)	-
Taricha torosa (California newt)	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs and slow-moving streams.	-	SSC	Reported from Live Oak and Cobal Canyons, north of Claremong (1990s records)	-

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
Reptiles		•			
Anniella pulchra pulchra (silvery legless lizard)	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	-	SSC	Reported near Ontario, Fontana, and Claremont (CDFG 2009)	-
Arizona elegans occidentalis (California glossy snake)	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	-	SSC	Reported in the vicinity of Mira Loma and Azusa; near Devore, Ontario, and Guasti (1946 records)	-
Aspidoscelis tigris stejnegeri (San Diego tiger whiptail) coastal whiptail (Cnemidophorus tigris stejnegari)	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	-	SSC	Reported in San Antonio Canyon near Mt. Baldy (CDFG 2009)	-
Charina umbratica (southern rubber boa)	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats. Snakes resembling C. umbratica reported from Mt. Pinos and Tehachapi mtns group with C. bottae based on mtDNA. Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	-	ST	Reported within Jeffrey pine and black oak forest near Harrison Mountain	-

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
Phrynosoma blainvillii (Blainville's horned lizard)	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	-	SSC	Reported near Devore, Ontario, Cucamonga Peak, Guasti, and San Bernardino (CDFG 2009)	-
Thamnophis hammondii (two-striped gartersnake)	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	-	SSC	Reported near Cucamonga Creek and near La Verne (2001 and 2010 records)	-
Birds					
Agelaius tricolor (tricolored blackbird)	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	-	ST, SSC	Reported from the San Bernardino Flood Control Basin (2014 record)	_
Aimophila ruficeps canescens southern (California rufous-crowned sparrow)	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	-	WL	Reported in Upland (2001 record)	-
Amphispiza belli belli (Bell's sage sparrow)	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a	-	WL	Reported north of Lytle Creek Wash near Devore (1997 record)	-

	Status Most Recent CNDDB Siting				Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
	shrub 6-18 inches above ground. Territories about 50 yards apart.				
Aquila chrysaetos (golden eagle)	Rolling foothills, mountain areas, sage- juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	-	WL, FP	Potentially present	-
Athene cunicularia (burrowing owl)	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low- growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	-	SSC	Observed in multiple locations in the Rancho Cucamonga and Ontario (1992-2013 records)	-
Buteo swainsoni (Swainson's hawk)	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	-	ST	Historically reported near Chino (1920 record)	-
Coccyzus americanus occidentalis (western yellow- billed cuckoo)	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	FT	SEª	Historically reported from Chino Creek (1931 record)	-
Cypseloides niger (black swift)	Reported from Wolfskill Falls east of	-	SSCª	Reported from Wolfskill Falls east of	-

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
	the Plan Area (1986 records)			the Plan Area (1986 records)	
Empidonax traillii extimus (southwestern willow flycatcher)	Riparian woodlands in Southern California.	FE	SE	Potentially Present	Not within final Critical Habitat (USFWS 2020)
Gymnogyps californianus (California condor)	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	FE	SE	Potentially Present	Not within final Critical Habitat (USFWS 2020)
Laterallus jamaicensis coturniculus (California black rail)	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	-	ST, FP	Reported near Chino (1931 records)	-
Polioptila californica (coastal California gnatcatcher)	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	FT	SSC	Reported near Lytle Wash and Cajon Wash and multiple locations in the City (1991 records)	Not in final Critical Habitat (USFWS 2020)
Vireo bellii pusillus (least Bell's vireo)	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	FE	SE	Reported along Cable Creek and Sycamore Flat, near Devore (2007 record)	Not in final Critical Habitat (USFWS 2020)

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
Mammals					
Antrozous pallidus (pallid bat)	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	-	SSC	Historically reported from Ontario (1951 record)	-
Chaetodipus fallax fallax (northwestern San Diego pocket mouse)	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	-	SSC	Reported from Cucamonga Creek to Upland (2002 record)	-
Chaetodipus fallax pallidus (pallid San Diego pocket mouse)	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	-	SSC	Reported west of Devore (1976 record)	-
Dipodomys merriami parvus (San Bernardino kangaroo rat)	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	FE	SSC	Reported east of Ontario and in Devore (1996 record)	Northeast portion of SOI located in final Critical Habitat (USFWS 2020)
Dipodomys stephensi (Stephens' kangaroo rat)	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	FE	FT	Reported southeast of Ontario	-

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
Eumops perotis californicus (western mastiff bat)	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	-	SSC	Reported in Pomona and Rancho Cucamonga (1925 and 1992 records)	-
<i>Lasiurus cinereus</i> (hoary bat)	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	-	WL	Historically reported 1.5 miles northwest of Claremont and near San Antonio Canyon (1940 and 1951 records)	-
<i>Lasiurus xanthinus</i> (western yellow bat)	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	-	SSC ^e	Reported in the vicinity of Pomona (CDFG 2009)	-
Lepus californicus bennettii (San Diego black-tailed jackrabbit)	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	-	SSC	Reported in Fontana (2001 record)	-
Neotoma lepida intermedia (San Diego desert woodrat)	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	-	SSC	Reported from Cucamonga Creek to Upland (2002)	
Nyctinomops femorosaccus (pocketed free- tailed bat)	Variety of arid areas in Southern California; pine-juniper woodlands, desert	-	SSC	Reported in the vicinity of San	-

			lost Recent DB Siting		Relationship of Plan Area
Species Name	Habitat1	USFWS	CDFW	Occurrence Information	to Critical Habitat
	scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.			Bernardino (1985 record)	
Nyctinomops macrotis (big free-tailed bat)	Roosts in buildings, caves, and occasionally in holes in trees. Big free-tailed bats in other areas prefer rugged, rocky terrain. The big free-tailed bat is rare in California. Records of the species are from urban areas of San Diego Co., and vagrants found in fall and winter.	-	SSC	Reported from Pomona (1987 record)	-
Perognathus longimembris brevinasus (Los Angeles pocket mouse)	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	-	SSC	Reported in Guasti and Cucamonga Peak (CDFG 2009)	-

Notes:

¹ Habitat descriptions were taken from the CNDDB General and Microhabitat descriptions.

Other sources:

IPAC Trust Resources List, 2018, accessed March 26, 2020, http://ecos.fws.gov/ipac/.

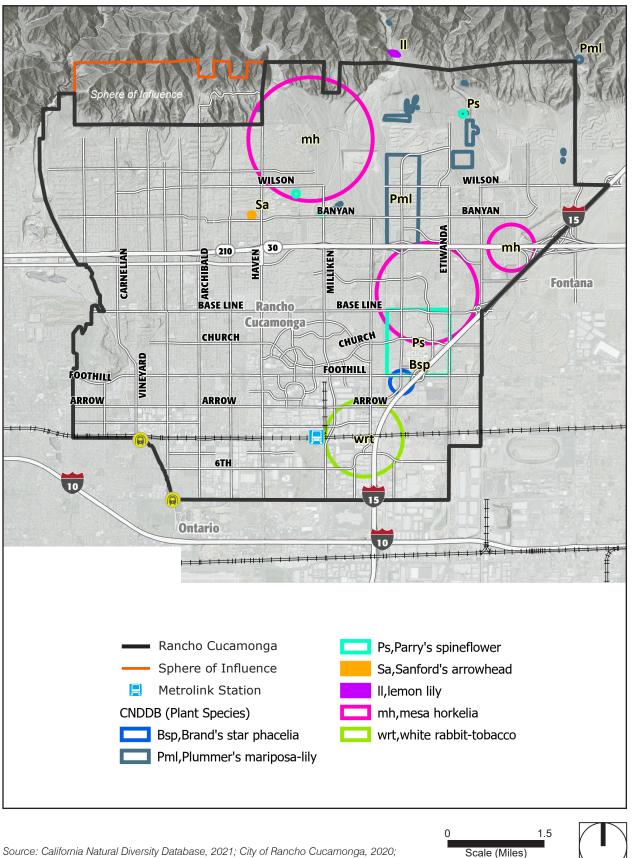
Federal Designations	State Designations			
FE = Federal Endangered	SE = State Endangered			
ST = State Threatened	ST = State Threatened			
PT = Proposed Threatened under	CE = State Candidate for Endangered Listing			
ESA	FP = CDFW Fully Protected			
	SA = CDFW Special Animals			
	SSC = CDFW Species of Special Concern			
	WL = Watch List			
	a Designation refers to nesting individuals			
	b Designation refers to wintering individuals			
	c Designation refers to burrow sites; wintering observations not considered special status for Orange County			
	d Designation refers to nesting colony			
	e Designation based on the draft updated mammalian species of special concern report			
	 Indicates information that is not applicable to the species. 			
	- Indicated information that is not applicable to the species.			

Source: Ecorp, 2020, Existing Conditions Report: Biological Resources, accessed June 2, 2021,

https://www.cityofrc.us/sites/default/files/2020

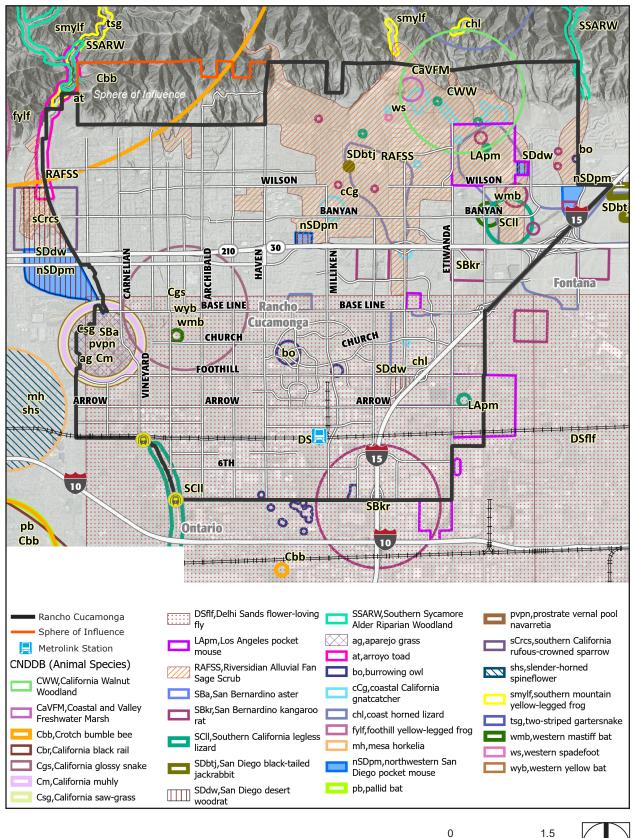
 $-06/PlanRC_ExistingConditionsReport_BiologicalResources_June2020.pdf.$

Figure 5.4-3a - California Natural Diversity Database Records in the Region - Plants 5. Environmental Analysis



ESRI, 2021

Figure 5.4-3b - California Natural Diversity Database Records in the Region - Animals 5. Environmental Analysis



Source: California Natural Diversity Database, 2021; City of Rancho Cucamonga, 2020; ESRI, 2021

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Scale (Miles)

Aquatic Resources

The city is within the Santa Ana River Watershed, a 2,620-square-mile area south of the eastwest ridges of the San Gabriel and San Bernardino Mountains. Rancho Cucamonga and its SOI are crossed by numerous ephemeral streams, generally originating in the northern mountainous areas of the San Bernardino National Forest.

Runoff from the city drains into Reach 3 of the Upper Santa Ana River, which is between Prado Dam and Mission Boulevard in Riverside County. Locally, there are four canyon watersheds within the San Gabriel Mountains that direct stormwater through the city. These four canyon watersheds are the Cucamonga Canyon, Deer Canyon, Day Canyon, and East Etiwanda Canyon. Two smaller watersheds, Demens and Hermosa Creeks, are just south of Cucamonga and Deer Canyons. These drainages are shown on Figure 5.4-4, *Drainages and Associated Riparian Vegetation Communities*. At the mouth of the San Antonio, Cucamonga, Deer, Day, East Etiwanda, and San Sevaine Canyons, alluvial fans are subject to flooding, and flood control basins and spreading grounds have been built to limit the impact and extent of floodwaters on downstream areas. Throughout the city, creeks have been channelized.

Within the western section of the city, Cucamonga, Demens, and Deer Creeks are the primary drainages. Demens and Deer Creeks join Cucamonga Creek, which runs southerly and connects to Chino Creek near the SR-71 freeway and to Mill Creek and the Santa Ana River at Prado Park, just east of Prado Dam. The eastern section of the city is drained by Day Creek, Etiwanda Creek, and San Sevaine Creek. Etiwanda Creek is joined by Day and San Sevaine Creeks, then runs southerly and connects to the Santa Ana River east of I-15.

Vegetation Types

Vegetation types described in this section are based on the generalized vegetation community classifications in the Rancho Cucamonga Biological Resources Existing Conditions Report; are shown on Figure 5.4-5, *Vegetation Types*; and are identified through focused vegetation community surveys. Vegetation types in the General Plan Area and the City's SOI include: California sycamore woodland, coast live oak woodland–California sycamore woodland, red will thicket, chaparral, mixed sage scrub, scale broom scrub, alluvial wash, mulefat thickets, grassland, annual brome grassland, ruderal, ornamental, orchard-agriculture, disturbed channel, developed/ornamental, and open water. These vegetation types are described below.

Riparian

Within the northern portion of the General Plan Area, particularly in the City's SOI, riparian vegetation occurs along the canyon bottoms. Vegetation types within this area consists of California sycamore woodland, coast live oak woodland, coast live oak–California sycamore woodland, and red willow thicket.

California sycamore woodland is dominated by the western sycamore (*Platanus racemosa*), which is scattered downstream in various drainages and is included in the alluvial wash vegetation type. A variety of species such as white alder (*Alnus rhombifolia*) and canyon live oak (*Quercus chrysolepsis*) of the southern sycamore-alder riparian woodland vegetation type were previously documented within Cucamonga, Deer, Day, and Etiwanda Creeks.

Coast live oak woodland within the General Plan Area is dominated by coast live oak (*Quercus agrifolia*).

Coast live oak–California sycamore woodland is co-dominated by coast live oak and western sycamore with an understory of toyon (*Heteromeles arbutifolia*), red willow (*Salix laevigata*), and mulefat (*Baccharis salicifolia*).

Red willow thicket, dominated by red willow, occurs throughout some canyon bottoms and within isolated patches. Other species present within these areas include mulefat as well as some California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*). A patch of willows exists at the western edge of the city extending along the edge of Cucmonga Creek, interspersed with mulefat, cattails (*Typha sp.*), and scattered laurel sumac (*Malosma laurina*). Another small patch of willows occurs near the northeastern corner of the City's SOI between Henderson and Morse Canyons. Other species present within this northern portion of the General Plan Area include rushes (*Juncus sp.*), deergrass (*Muhlenbergia rigens*), western ragweed (*Ambrosia psilostachya*), and nightshade (*Solanum sp.*).

Chaparral

Scattered patches of chaparral occur throughout the City's SOI. Chaparral shrubs in this area are larger than mixed sage scrubs that surround this vegetation type. Species previously identified within the General Plan Area include ceanothus (*Ceanothus sp.*), holly-leaved cherry (*Prunus ilicifolia*), manzanita (*Arctostaphylos sp.*), Nuttall's scrub oak (*Quercus dumosa*), and Our Lord's candle (*Yucca whipplei*).

Sar Sevaine Canyon CITY OF ONTANA ÉĽ Hillside Rd Lemon Ave ast K Š 30 Base Li Terra Vista Pkwy Church St ŝ othill Bl (66 666 Arrow Hw Burlingtop Northern Santa Fe Railway strolink E 0 ONTANA -CITY OF # + 0 Rancho Cucamonga Sphere of Influence Waterways & Regional Water Bodies

Figure 5.4-4 - Drainage and Associated Riparian Vegetation Communities 5. Environmental Analysis

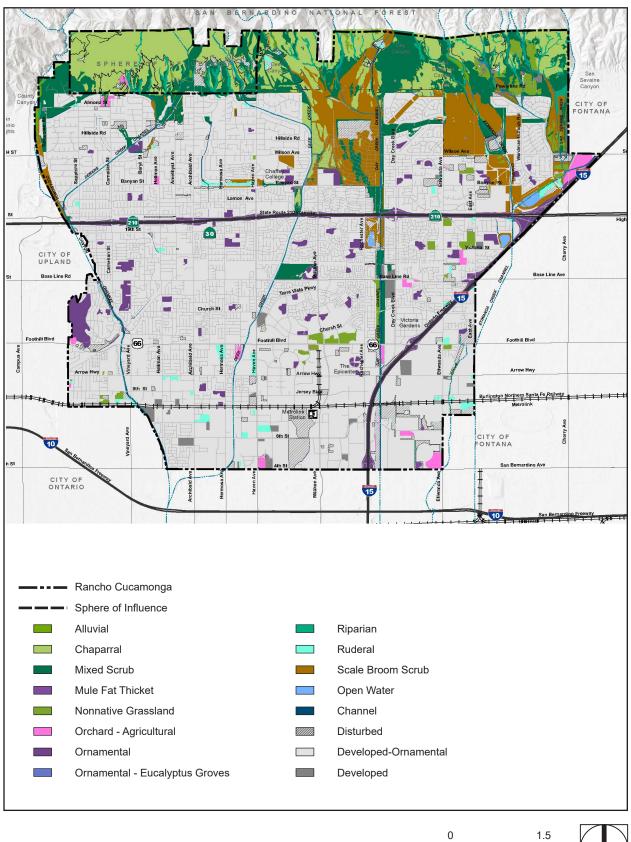
Source: NWI, 2020; USGS NHD, 2019

1.5

Scale (Miles)

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Figure 5.4-5 - Vegetation Types 5. Environmental Analysis



Source: ECORP, 2020 (Vegetation Community Surveys)

Scale (Miles)

Mixed Scrub

Outside of the alluvial areas, mixed scrub occurs throughout the majority of the City's SOI in the foothills of the General Plan Area, as well as within remnant patches of the city's boundary. Within this vegetation type, shrub density, species composition, and species percent coverage vary by patch, with the dominant species consisting of black sage (*Salvia mellifera*), California buckwheat, California sagebrush, deerweed (*Lotus scoparius*), thick-leaf yerba santa (*Eriodictyon crassifolium*), and white sage (*Salvia apiana*). Other nondominant species include brittlebush (*Encelia farinosa*), California aster (*Lessingia filaginifolia*), and telegraph weed (*Heterotheca grandiflora*), with the amount of nonnative vegetation varying by patch. Some areas are devoid of nonnative species, and other areas, particularly isolated patches, contain large portions of invasive species such as black mustard (*Brassica nigra*), bromes (*Bromus spp.*), common horehound (*Marrubium vulgare*), and tocalote (*Centaurea melitensis*).

Scale Broom Scrub

Scale broom scrub occurs within the alluvial fans of the major creeks that drain the surrounding foothills and as remnant patches within areas of existing development. The ideal soil type for this vegetation type is sandy with a large number of boulders and cobbles. Scale broom (*Lepidospartum squamatum*) is present at greater than one percent coverage and is co-dominated by a variety of species, including California buckwheat, mountain mahogany (*Cercocarpus betuloides*), and Our Lord's candle. Other species observed throughout scale broom scrub include deerweed, laurel sumac, mulefat, western sunflower (*Helianthus annuus*), and white sage, with western sycamore trees also scattered throughout this vegetation type. Some portions of scale broom scrub are disturbed, while the northern portions of the alluvial fan are densely vegetated or contain less cover and more nonnative species such as black mustard and tocalote.

Nonnative Grassland

Throughout the General Plan Area, nonnative grasslands occur with densities varying by parcel. Nonnative grasslands in the area include annual brome grassland, which is dominated by *Bromus* spp., as well as a mix of native and nonnative grasses and forbs, such as needlegrass (*Nasella* sp.), bromes, and black mustard. There are few scattered shrubs within these areas.

Ruderal

Ruderal vegetation mapped throughout the General Plan Area includes a variety of weedy species such as black mustard, Russian thistle (*Salsola tragus*), and tocalote. Scattered scrub species also occur throughout some ruderal areas. Species coverage varies throughout the area by parcel.

Ornamental

Ornamental vegetation throughout the General Plan Area is predominantly in recreational areas such as golf courses, parks, and sports fields, as well as landscaping adjacent to the major freeways. Turf grass also comprises a large portion of the landscaping associated with the recreational areas. In addition to common ornamental species, these areas contain nonnative trees such as gum (*Eucalyptus spp.*), pine (*Pinus spp.*), or Peruvian pepper (*Schnius molle*). Vegetation adjacent to the freeways consists of sage scrub species in some areas, with

additional plantings of nonnative species such as wattle (*Acacia sp.*), Peruvian pepper, and hottentot fig (*Carpobrotus edulis*).

Ornamental: Eucalyptus Groves

Ornamental eucalyptus groves occur in patches within the northern portion of the City's SOI near Henderson and Morse Canyons. The most common species is nonnative gum (*Eucalyptus spp.*).

Orchard-Agriculture

Orchard-agriculture occurs in isolated patches throughout the General Plan Area and mostly consists of fallow grape vineyards. A large number of nonnative species, such as black mustard, are present in this vegetation type as well as strawberry fields, citrus groves, and a tree farm.

Disturbed

Disturbed areas throughout the General Plan Area consist of exposed soil with little or no vegetation. Some of these areas have been subject to earth disturbance such as grading.

Channel

Channels in the General Plan Area are mostly concrete lined and trapezoidal or vertical walled. Some channels have open water, while others are dry. The quantity of open water is small and seasonally intermittent.

Developed/Ornamental

The majority of the General Plan Area is mapped as developed/ornamental and consists of commercial, industrial, and residential structures and associated landscaping as well as paved roads. Vegetation is varied and dominated by nonnative, ornamental species, including Peruvian pepper, pine, gum, flowering plum (*Prunus cerasifera*), and African fountain grass (*Pennisetum setaceum*).

Open Water

Open water occurs within various natural and constructed catch basins that gather water flowing from the mountains north of the city. Open channels may provide corridors that encourage wildlife movement and migration.

Wildlife Movement

Wildlife species move between two or more habitats within linear landscape elements called wildlife corridors. Wildlife corridors contribute to population viability by the continual exchange of genes between populations, by providing access to adjacent habitat areas for foraging and mating, and by providing recolonization routes for suitable habitat after local displacement or ecological catastrophes, such as fires or other natural disasters. Wildlife corridors can be bounded by development or areas unsuitable for wildlife, but contain enough food, cover, and/or water to facilitate wildlife migration between suitable habitats and prevent isolation of populations. Landscape features that would be considered travel routes consist of ridgelines, drainages, canyons, or riparian areas. These landscape features are used by wildlife to gain

access to essential resources and suitable habitats. Areas adjoining two habitats are referred to as habitat linkages.

The San Gabriel–San Bernardino Linkage was identified as one of 15 landscape linkages in California that are crucial to maintaining ecological and evolutionary processes among large blocks of protected habitat in the South Coast Ecoregion. The San Gabriel–San Bernardino Linkage is at the divide between the San Gabriel and San Bernardino Mountains and includes the mountains and foothills north of and within the General Plan Area. Due to the variety of elevations and the transition from scrub and woodland in the south to the Mojave Desert in the north, there is a large diversity of natural communities in this region.

In the City of Rancho Cucamonga, its SOI, and the surrounding region, the linkage design is shown on Figure 5.4-6, *Wildlife Movement Linkages Map*. This linkage covers approximately 129,901 acres and has three roughly parallel routes to accommodate diverse species and ecosystem functions. The northern and southern branches are about 24 miles long and include substantial private lands; the central branch is shorter and largely under public ownership.

The northern branch of the linkage provides a high desert connection dominated by chaparral communities, with patches of desert scrub, juniper and Joshua tree woodlands, grassland, and riparian habitats. The central branch of the linkage connects a series of higher elevation forest and shrubland habitats. The southern branch encompasses coastal and alluvial fan scrub habitats and includes portions of Cucamonga, Deer, Day, Etiwanda, Morse, and San Sevaine Creeks. The San Gabriel–San Bernardino Linkage consists mostly of natural vegetation, but urban and agricultural development covers approximately 1.8 percent of the area. Approximately 66 percent of the linkage had some level of conservation protection as of 2004.

The majority of the area in Rancho Cucamonga and its SOI is developed with little natural open space and few wildlife movement corridors. Of the few existing corridors, creeks and open space drainage canals connect wildlife to the mountains to the north. Additional migration corridors in the General Plan Area include a golf course, parks, and vacant lots. The City encourages the protection, enhancement, and proliferation of native landscaping, especially near existing corridors, to maintain these important resources. Additionally, new culverts should be designed with bridge undercrossings if they are deemed valuable for wildlife movement. If a bridge is not possible, a 12-foot by 12-foot box culvert or larger for bigger animals should be designed.

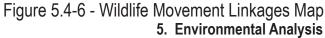
Large, continuous open space areas and areas already designated for preservation in perpetuity are in the northern part of the General Plan Area. Within this area, development on open space and undeveloped areas could result in habitat fragmentation and constrain wildlife movement that has regional significance. The City can mitigate impacts to wildlife movement by planning and incorporating design features into future development projects that allow wildlife dispersal between large patches of remaining habitat. Studies of specific wildlife corridors may be required for any proposed land use conversions in these areas, and some general principles of evaluation and design should be implemented, including:

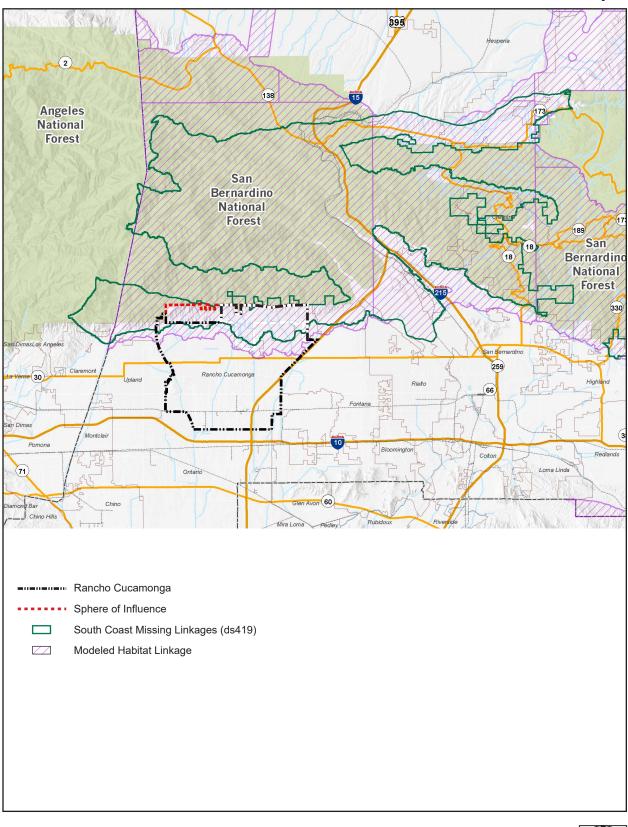
- Monitor the use of corridors by target wildlife species.
- Approve corridor designs that allow for adaptive management.
- Incorporate wildlife corridor designs into development.

- Maintain as much natural open space as possible in designated corridor areas.
- Develop strict lighting restrictions for houses adjacent to the corridor to prevent light pollution in the corridor. This includes directing lights downward and inward toward the home.

The City adopted the EHNCP in 2019. The EHNCP abuts much of the northern open space areas and proposes annexation of 4,400 acres of unincorporated San Bernardino County in the foothills of the San Gabriel Mountains, between the northern city limits and the San Bernardino National Forest. The upper 3,200 acres identified in the EHNCP lie north of the existing foothill community, and the lower 1,200 acres is surrounded on the east, south, and west by housing tracts. The intent of the EHNCP is to conserve the area's natural and rural character, recreational and habitat resources, and visual qualities for future generations.

These large open spaces may not serve as wildlife corridors where there are few or no manmade or naturally occurring physical constraints to wildlife movement. Rather, these open spaces are large enough to maintain viable populations of species and to provide a variety of travel routes, namely, canyons, ridgelines, trails, riverbeds, and others. These "local" routes may be used by wildlife while searching for food, water, shelter, and mates who will therefore not need to cross into other large open space areas.





Source: San Bernardino County Regional Conservation Investment Strategy, 2018; Southern California Wildlands (scwildlands.org), 2018 0

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5.4.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- B-1 Have a substantial 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 California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B-3 Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- B-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.
- B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- B-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.

5.4.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant policies of the Rancho Cucamonga General Plan Update that may reduce potential impacts to biological resources.

Resource Conservation Element

- **GOAL RC-3 HABITAT CONSERVATION:** Wildlife habitats that support various plants, mammals, and other wildlife species.
- **RC-3.1** Sensitive Habitat. Encourage the preservation of the integrity of sensitive land resources that have significant native vegetation and/or habitat value such as riparian habitat areas, creek corridors, Riversidean Alluvial Fan Sage Scrub (RAFSS), wetlands, and sensitive wildlife habitat that supports biological resources.

City of Rancho Cucamonga General Plan Update Draft EIR 5. ENVIRONMENTAL ANALYSIS 5.4 BIOLOGICAL RESOURCES

- **RC-3.2 Biological Preserves.** Allow and encourage the expansion of sensitive biological preserve areas (e.g., North Etiwanda Preserve, Day Creek Preserve, and San Sevaine Preserve) and other important habitat areas with an emphasis on wildlife connectivity between habitats and connectivity to the national forest.
- **RC-3.3** Wildlife Corridors. Encourage the creation, maintenance, and protection of open space areas that provide strategic wildlife corridors and vital connectivity between habitat areas.
- **RC-3.4** Landscape Design. Encourage new development to incorporate native vegetation materials into landscape places and prohibit the use of species known to be invasive according to the California Invasive Plant Inventory.
- **RC-3.5 Buffers from New Development.** Require new developments adjacent to identified plant and wildlife habitat areas to establish and maintain a protective buffer.
- **RC-3.6 Grading and Vegetation Removal.** Limit grading and vegetation removal of new development activities to the minimum extent necessary for construction and to reduce erosion and sedimentation.
- **RC-3.7 Urban Forestry Plan.** Minimize damage associated with wind- and firerelated hazards and risks and address climate change and urban heat island effects through the development of an urban forestry plan that addresses a proper and appropriate landscaping, plant and tree selection and replacement, and planting and vegetation management techniques.

5.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.4-1: Buildout of the proposed Land Use Plan would impact sensitive plant and animal species known to occur in the City of Rancho Cucamonga. [Threshold B-1]

As shown on Figure 5.4-1, the majority of conservation areas, both existing and proposed, are in the northeastern portion of the city and SOI. Much of the SOI is undeveloped and includes areas with natural vegetation, including the San Bernardino National Forest. Most of the city is highly urbanized and provides minimal habitat value for sensitive and special status species. Less developed areas in the city and SOI that are open space, water features, or agricultural land have the potential to support native species and natural communities. Urbanized areas typically do not have the potential to support biological resources.

Figure 5.4-2, *Designated Critical Habitat in the City and SOI*, identifies critical habitat for the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) (FE, SSC) that has been designated within or adjacent to the study area. Potential land covers that could contain sensitive habitat for biological species are open space areas, vacant urban land, and

agricultural land. The General Plan Update allows for development on vacant urban land and agricultural land in the city and SOI that could potentially include sensitive biological resources.

As shown on Figure 5.4-3a, *California Natural Diversity Database Records in the Region*, and in Table 5.4-1, *Special Status Plant Species with Records in the Study Area*, 61 special status species have CNDDB or CNPS Rare Plant Inventory records in the Plan Area. These special status plant species could be associated with valuable habitat for wildlife, and in some cases may contribute to wildlife movement. Therefore, implementation of the General Plan Update could impact areas of previously undisturbed habitat.

Buildout of the city and SOI in accordance with the General Plan Update could impact special status vegetation or special status wildlife in the city. The city's environment is not static and may change over time as a result of development, fire, climate change, and other environmental factors. Therefore, other vegetation communities may become sensitive and/or other species may be listed in the future.

The proposed General Plan Resource Conservation Element identifies policies to reduce impacts on Rancho Cucamonga's biological resources, such as Policy RC-3.1, which encourages the preservation of sensitive vegetation and/or habitats, and Policy RC-3.2 which allows and encourages the expansion of sensitive biological preserve areas.

Even with adherence to the City's policies protecting biological resources and compliance with state and federal law, future development projects could require more detailed evaluations of biological resources and formulation of mitigation measures by a qualified biologist. Standard condition of approval 5.4-1 requires pre-construction surveys on project sites if there is potential for special status species on the site, and requires measures to mitigate impacts if special status species are present. Standard condition of approval 5.4-2 requires project applicants to obtain take authorization through Section 7 or Section 10 of FESA prior to project implementation if a federally listed species is present. Standard conditions of approval 5.4-3 requires authorization from CDFW if state-listed threatened or endangered species are present. Implementation of these standard conditions of approval would protect special status species but it is uncertain as to whether changes in project design or mitigation would reduce impacts to a less than significant level. Even though most of the future growth is anticiapted to occur in focus areas that are currently developed and are surrounded by existing development and unlikely to provide high quality habiat, the impact on sensitive plant and animal species is considered significant and unavoidable.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.4-1 would be potentially significant.

Mitigation Measures

No feasible mitigation measures are available.

Level of Significance After Mitigation: Impact 5.4-1 would be significant and unavoidable.

Impact 5.4-2: Implementation of the proposed General Plan Update could impact sensitive natural communities, including wetlands and riparian habitat. [Thresholds B-2 and B-3]

Numerous streams in the Santa Ana Watershed drain from the north into the Plan Area. The western edge of the Plan Area runs along Cucamonga Creek. Other creeks that flow through the city include Deer Creek, Day Creek, and Etiwanda Creek.

Riparian vegetation can be found along the canyon bottoms in the northern portion of the Plan Area, predominantly within the SOI. Channels occur within the Plan Area; some channels are dry while others have water. Open water occurs in various natural and constructed catch basins throughout the Plan Area.

Wetlands and riparian habitats in the Plan Area are shown on Figure 5.4-4, *Drainages and Associated Riparian Vegetation Communities*, and include waterways and regional water bodies. Specifically, these water resources may support biological resources, including riparian vegetation and associated wildlife species. As shown in Table 5.4-1, *Special Status Plant Species with Records in the Study Area*, at least 13 special status plant species are found in riparian and/or freshwater habitats. These species include *Berberis nevinii* (Nevin's barberry), *Calystegia felix* (lucky morning-glory), *Centromadia pungens* ssp. *laevis* (smooth tarplant), *Galium johnstonii* (Johnston's bedstraw), *Heuchera caespitosa* (urn-flowered alumroot), *Juglans californica* (Southern California black walnut), *Lilium humboldtii* ssp. *ocellatum* (ocellated Humboldt Iily), *Lilium parryi* (lemon Iily), *Muhlenbergia utilis* (aparejo grass), *Pseudognaphalium leucocephalum* (white rabbit-tobacco), *Symphyotrichum greatae* (Greata's aster), *Cladium californicum* (California sawgrass), and *Sagittaria sanfordii* (Sanford's arrowhead).

As described in the analysis for Impact 5.4-1, the goals and policies in the Resource Conservation Element would help conserve, protect, and manage Rancho Cucamonga's biological resources. Specifically, Policy RC-3.1 and Policy RC-3.2 would ensure that the City protects sensitive habitats, such as wetlands and riparian habitats, and biological preserves. In addition, as noted in Impact 5.4-1, standard conditions of approval 4.4-1, 4.4-2, and 4.4-3 would prevent impacts on special status species by requiring pre-construction surveys and obtaining take permits from appropriate agencies. These would protect species in sensitive natural communities. Standard conditions of approval 5.4-6 and 5.4-7 require developers to obtain permits from the USACE and RWQCB for waters of the U.S. and from CDFW for waters of the state. Compliance with these standard conditions of approval would ensure no net loss of waters of the U.S. or waters of the state. Consequently, impacts on sensitive natural communities are considered less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.4-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.4-2 would be less than significant.

Impact 5.4-3: Development pursuant to the proposed General Plan Update would not adversely impact wildlife movement in and surrounding the Plan Area. [Threshold B-4]

The San Gabriel-San Bernardino Linkage is at the divide of the San Gabriel and San Bernardino Mountains and includes the mountains and foothills north of and in the Plan Area. The final linkage design, as shown on Figure 5.4-6, *Wildlife Movement Linkages Map*, covers approximately 129,901 acres and has three roughly parallel routes to accommodate diverse species and ecosystem functions. Natural vegetation makes up most of the linkage design, but urban and agricultural development covers approximately 1.8 percent of the area. As of 2004, approximately 66 percent of the linkage design had some level of conservation.

The majority of the Plan Area is developed. These areas have little natural open space and therefore provide few wildlife movement corridors. Existing corridors include creeks and open drainage canals, which connect wildlife to the mountains to the north. The northern part of the Plan Area has large, contiguous open space areas and areas designated for preservation in perpetuity.

A number of migratory bird species are known to occur within the city (see Table 5.4-2). Buildout of the proposed project could impact these migratory birds through future development and removal of vegetation that could be used for nesting. The Migratory Bird Treaty Act administered by the USFWS governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. In addition, California law, particularly relevant statutes in the Fish and Game Code, provide protections for birds and their active nests by prohibiting the:

- Take a bird, mammal, fish, reptile, or amphibian. (Fish and Game Code § 2000)
- Take, possess, or needlessly destroy the nest or eggs of any bird. (§ 3503)
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks, and eagles) or the nests or eggs of such bird. (§ 3503.5)
- Take or possess any of the 13 fully protected bird species listed in § 3511.
- Take any nongame bird (i.e., bird that is naturally occurring in California that is not game bird, migratory game bird, or fully protected bird). (§ 3800)
- Take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Acy or any part of such bird, except as provided by rules or regulations adopted by the Secretary of the Interior under the Migratory Bird Treaty Act. (§ 3513)
- Take, import, export, possess, purchase, or sell any bird (or products of a bird) listed as an endangered or threatened species under the California Endangered Species Act unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (§§ 2050 et seq.).

Development in existing open space and undeveloped areas of the Plan Area could result in habitat fragmentation and constrain wildlife movement that has regional significance. The Resource Conservation Element of the proposed General Plan Update includes policies that would reduce impacts to wildlife corridors, such as Policy RC-3.3, which encourages

maintaining and creating wildlife corridors and connectivity. In addition, to avoid conflicts with the MBTA, standard condition of approval 5.4-4 requires preconstruction nest surveys for projects with construction activities involving vegetation removal conducted between September 16 and March 14. If active nests are present, it requires buffers around the nest and monitors to ensure there are no inadvertent impacts on the nests. Compliance with the MBTA would ensure impacts to migratory birds are less than significant.

With adherence to the General Plan policies and implementation of the standard conditions of approval (specifically 5.4-7) impacts to wildlife movement would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.4-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.4-3 would be less than significant.

Impact 5.4-4: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. [Thresholds B-5 and B-6]

The City adopted the EHNCP in October 2019 that includes the conservation of the alluvial fan and foothills between the northernmost neighborhoods and the National Forest. Over 82 percent of the EHNCP is in the Rural/Conservation area, which contains several existing and planned preserves, numerous hiking trails, and natural features. These 3,603 acres of Rural/Conservation would provide for a mix of conserved habitat mitigation lands and open space, existing open space preserves, and very-low-density rural homes. The EHNCP envisions the conservation area as an area of permanently conserved, well-managed habitat with a few small islands of rural living in harmony with nature. The General Plan Update would designate this area Natural Open Space, Rural Open Space, and General Open Space and Facilities, with the latter two designations allowing residential development at very low densities. This would be consistent with the vision of the EHNCP. Therefore, the proposed project would not conflict with a conservation plan.

Tree or plant removal permits are required for the removal of regulated trees and plants. Municipal Code Chapter 17.80, Tree Preservation, protects certain designated heritage trees, which are considered a community resource, from indiscriminate cutting or removal; the provisions of this chapter are specifically intended to protect and expand the eucalyptus windrows. A tree removal permit is required before such heritage trees may be removed, and mitigation is required to account for the loss of the tree.

Compliance the County's ordinances and City's municipal code would protect these resources. Additionally, the proposed General Plan policies, such as Policy RC-3.1, Policy RC-3.2, and Policy RC-3.3, would help preserve and protect sensitive habitats and biological preserves as well as wildlife corridors, and Policy RC-3.4, Policy RC-3.5, and Policy RC-3.7 would encourage the use of noninvasive species, maintenance of protective buffers adjacent to plant and wildlife habitat areas, and the development of an urban forestry plan. Therefore, future development under the proposed General Plan would be required to comply with applicable policies governing biological resources, which would ensure a less than significant impact.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.4-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.4-4 would be less than significant.

5.4.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts on biological resources is the County. Future projects in the General Plan Area could impact sensitive species directly and/or indirectly through impacts on those species' habitats. These projects would be required to comply with existing laws and regulations protecting biological resources.

Any development wihtin the proposed may result in impacts to biological resources. While compliance with standard conditions of approval, and future project-specific mitiation would reduce potential impacts on biological resources, it is uncertain if all impacts can be reduced to less than significant. Therefore, it is the project contribution to biological impacts is considered cumulatively considerable.

5.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.4-2, 5.4-3, and 5.4-4.

Without mitigation, this impact would be **potentially significant**:

- Impact 5.4-1 The proposed project could impact senstiive plant and animal species.
- Cumulative The proposed project could contribute to cumulative impacts to biological resources

5.4.7 MITIGATION MEASURES

Impact 5.4-1

There are no feasible mitigation measures.

5.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The overall design concept for the General Plan Update is to intensify areas of the city that are already developed, though at a less than potential level, or are planned for development because the land is surrounded by developed areas. In addition, the City has a number of conservation areas, has specifically identified areas in the foothills to the north as eligible for new conservation areas, and has designated these areas for small-footprint development to help preserve resources. The General Plan Update policies and standard conditions of approval would reduce impacts to less than significant. However, as detailed in Impact 5.4-1, future development projects could require more detailed evaluations of biological resources and formulation of mitigation measures by a qualified biologist. Even though most of the future growth is anticiapted to occur in focus areas that are currently developed and are surrounded by existing development and unlikely to provide high quality habiat, the impact on sensitive plant and animal species is considered significant and unavoidable

5.4.9 REFERENCES

- Rancho Cucamonga, City of. 2019. "Executive Summary." Etiwanda Heights Neighborhood and Conservation Plan. Accessed April 21, 2021. https://etiwanda-heightsregis.hub.arcgis.com/.
 - -----. 2020, June. City of Rancho Cucamonga General Plan Update: PLAN RC Biological Resources Existing Conditions Report, June 2020. In DEIR Appendix 2-1.

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5.5 CULTURAL RESOURCES

Cultural resources comprise archaeological and historical resources. Archaeology studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, or cultural use or association. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed Rancho Cucamonga General Plan Update to impact cultural resources in the City of Rancho Cucamonga and its sphere of influence (SOI). The analysis in this section is based in part on the following information:

 City of Rancho Cucamonga General Plan Update: PLAN RC Cultural Resources Existing Conditions Report, June 2020

A complete copy of this study is included as Appendix 2-1 to this DEIR.

Chapter Overview

Rancho Cucamonga includes numerous properties listed in the City's "Historic Site List," the National Register of Historic Places, the California Register of Historic Resources, California Historical Landmarks, California Points of Historical Interest, Designated Local Landmarks, and Designated Points of Interest. Additionally, the City has identified properties potentially eligible for listing in the National Register of Historic Places that are classified "Potential National Register" properties and "Potential Local Landmarks."

This chapter concludes that future development under the General Plan Update could adversely impact some of these historic resources. Historic structures and sites that have been designated potentially eligible for future historic resources listing may be vulnerable to development activities accompanying infill, redevelopment, or revitalization. The placement of new buildings adjacent to a historic resource may result in indirect impacts to access, visibility, and visual context. However, historic resources listed in the national, California, or local registers maintained by the City would be protected through local ordinances, the General Plan Update policies, and state and federal regulations restricting alteration, relocation, and demolition of historical resources.

In addition, long-term implementation of the General Plan Update land use plan could allow grading of known and unknown sensitive areas that could potentially cause the disturbance of archaeological resources. However, all cultural resources would be protected under the General Plan Update policies, the California Public Resources Code, and the California Environmental Quality Act.

Heart of the Matter

Rancho Cucamonga is a city of three historic communities that have developed into one city. This chapter reinforces the City's commitment to recognizing, protecting, and maintaining Rancho Cucamonga's past. Understanding that economic prosperity and growth can sometimes overrun the historic fabric of the community, historic preservation groups and the City have made efforts to protect the historical buildings and landmarks as Rancho Cucamonga developed from vineyards and citrus groves into the existing residential neighborhoods and industrial and commercial centers. This chapter focuses on the City's intent to respect the history of the area through policies designed to allow adaptive reuse of historic structures so that they can remain a part of the city.

5.5.1 ENVIRONMENTAL SETTING

5.5.1.1 Regulatory Background

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Native American Graves Protection and Repatriation Act

NAGPRA is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

National Register of Historic Places

The NRHP is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archaeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance which have been documented and evaluated according to uniform standards and criteria.

Authorized under the NHPA, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archaeological resources. The NRHP is administered by the National Park Service, which is part of the US Department of the Interior.

To be eligible for listing in the National Register, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of our history;
- Is associated with the lives of persons significant in our past;
- Embodies the distinctive characteristics of a type, period or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction;
- Has yielded, or may be likely to yield, information important in history or prehistory.

To retain historic integrity, a property will always possess several and often most of the aspects of integrity. These are location, design, setting, materials, workmanship, feeling, and association.

State Regulations

California Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the California Public Resources Code (PRC). In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission; require that descendants be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

California Register of Historical Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The California Register of Historic Resources (CRHR) is the authoritative guide to the state's significant historical and archaeological resources.

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- Is associated with the lives of persons important to local, California, or national history;
- Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values;
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may change its historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance. The resource must be approved for designation by the County Board of Supervisors or the City/Town Council in whose jurisdiction it is located; be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. A resource must meet at least one of these following criteria:

- Be the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California);
- Be associated with an individual or group having a profound influence on the history of California;
- Be a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designed, or master builder.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historical resource may be designated as both a landmark and a point. If a point is subsequently granted status as a landmark, the point designation is retired.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type within the local geographic region (city or county);
- Be associated with an individual or group having a profound influence on the history of the local area;
- Be a prototype of, or an outstanding example of, a period, style, architectural movement or construction or be one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

California Historic Building Code

The California Historic Building Code—California Code of Regulations, Title 24, Part 8—provides regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historic Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide access for persons with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

Mills Act

Under the Mills Act, California Government Code Sections 50280 et seq., a city or county may contract with the owner of any qualified historical property to preserve the property's historic features. The owner continues to preserve the property, and the State reduces property taxes. The City adopted the Historic Property Preservation (Mills Act) Program in 2002.

Local Regulations

City of Rancho Cucamonga Municipal Code

Chapter 2.24, Historic Preservation

The purposes of Chapter 2.24, Historic Preservation, are to:

- 1. Provide a mechanism to identify, designate, protect, preserve, enhance, and perpetuate those historic sites, structures, and objects that embody and reflect the City's aesthetic, cultural, architectural, and historic heritage;
- 2. Foster civic pride in the beauty and accomplishments represented by the City's historic landmarks and distinctive neighborhoods and recognize these resources as economic assets;
- 3. Encourage the protection, enhancement, appreciation, and use of structures of historical, cultural, architectural, community, or aesthetics value that have not been designated as historical resources but are deserving of recognition;
- 4. Enhance the quality of life and promote future economic development within the city by stabilizing and improving the aesthetic and economic value of such districts, sites, structures, and objects;
- 5. Encourage adaptive reuse of the City's historic resources by promoting public awareness of the value of rehabilitation, restoration, and maintenance of existing buildings as a means to conserver reusable material and energy resources;
- 6. Integrate historic preservation within the City's comprehensive development plan; and
- 7. Promote and encourage historic preservation through continued private ownership and utilization of such sites, buildings, and other structures now so owned and used, to the extent that objectives listed above can be attained under such policy.

Chapter 17.18, Historic Preservation Commission Decisions

The Rancho Cucamonga Municipal Code was amended in 2012 to include Chapter 17.18, Historic Preservation Commission Decisions, whose purpose is to:

...establish permits and entitlements that are decided by the historic preservation commission and is intended to work in conjunction with Chapter 2.24, Historic Preservation, of this Code. This Chapter provides mechanisms to identify, designate, protect, preserve, enhance, and perpetuate historic sites, structures, and objects that embody and reflect the City's aesthetic, cultural, architectural, and historic heritage. Each permit and entitlement type is described in this Chapter in terms of purpose and applicability, exemptions, review process, findings for approval, and conditions. General processing procedures are established in Chapter 17.14, General Application Processing Procedures. (Code 1980, § 17.18.010; Ord. No. 855, § 4, 2012) Chapter 17.18 provides detailed information on the criteria for designation of historic resources; the certification, maintenance, and preservation of historic resources; the process by which historic resources may be demolished; and information regarding the historic preservation fund and preservation incentives that may be utilized for the benefit of property owners and the greater community.

Landmark Designation Program

An important element of the program is the identification of benefits and incentives to encourage participation. The City has designated many Landmarks and Points of Interest within Rancho Cucamonga, and there exists a potential to do the same within the SOI once additional areas are annexed into the city. Participation in the Landmark Designation Program provides the following benefits:

- Qualifies buildings to use the flexible Historical Building Code.
- Qualifies the owners to apply for use of the Mills Act contract for lower property taxes.
- Enables owners to receive free information about rehabilitation.
- Fosters civic pride and encourages additional historical research.
- Allows qualified owners to participate in the City's Landmark Plaque Program.

Specific and Neighborhood Plans

The City has several specific or neighborhood plans to guide development in certain areas in the city. These plans must be consistent with the General Plan, but can reflect the individuality of each of the areas subject to these plans. Several of the existing plans are listed below. Future plans present an opportunity to incorporate historic preservation and management of the City's history and prehistory using the goals and policies of the existing General Plan, plus new goals and policies that reflect the changes in regulations and the historic profile of the city.

- Caryn Planned Community
- Central Park Master Plan
- Empire Lakes Specific Plan
- Empire Yards Specific Plan
- Etiwanda Heights Neighborhood and Conservation Plan
- Etiwanda Specific Plan
- Etiwanda North Specific Plan
- Etiwanda Highlands Foothill Boulevard Visual Improvement Plan
- Pacific Electric Trail Master Plan
- Terra Vista Community Plan
- Town Square Master Plan
- Trail Implementation Plan
- University Property
- Victoria Gardens Master Plan
- Victoria Arbors Master Plan
- Victoria Community Plan

Standard Conditions of Approval

There are existing regulations that reduce impacts on cultural or historical resources. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for impacts on cultural or historical resources in the city. Existing regulations that reduce impacts on cultural or historical resources include the standard conditions listed here.

- **5.5-1:** If a future project pursuant to the General Plan Update contains a designated Historical Landmark, the site shall be developed and maintained in accordance with the applicable Historic Landmark Alteration Permit. Any further modifications to the site including, but not limited to, exterior alterations and/or interior alterations which affect the exterior of the buildings or structures, removal of landmark trees, demolition, relocation, reconstruction of buildings or structures, or changes to the site, shall require a modification to the Certificate of Appropriateness subject to Historic Preservation Commission review and approval.
- **5.5-2:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.
- **5.5-3:** If a building within the project area was constructed more than 50 years ago, the City will require a determination of whether the building, or site, could be considered historic. If the project is considered historic Chapter 17.18 Historic Preservation will apply.
- 5.5-4: Prior to any construction activities that may affect historical resources (i.e., structures 45 years or older), a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards in architectural history or history. This shall include a records search to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or designated in the National Register of Historic Places, California Register of Historic Resources, or a local register. Following the records search, the qualified architectural historian shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Pursuant to the definition of a historical resource under CEQA, potential historical resources shall be evaluated under a developed historic context.
- 5.5-5: To ensure that projects requiring the relocation, rehabilitation, or alternation of a historical resource not impact its significant, the Secretary of Interior's Standards for the Treatments of Historic Properties shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the Professionally Qualified Standards. Prior to any construction activities that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Rancho Cucamonga.

- 5.5-6: If a proposed project would result in the demolition or significant alteration of historical resource, it cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the resource to the greatest extent possible. Recordation shall take the form of Historic American Buildings Survey, Historic American Engineering Record, or Historic American Landscape Survey documentation, and shall be performed by an architectural historian or historian who meets the Professionally Qualified Standards. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information shall be reproduced on archival paper and placed in appropriate local, state, or federal institutions. The specific scope and details of documentation would be developed at the project level.
- 5.5-7: If cultural resources that are eligible for listing to the National Register of Historic Places, California Register of Historic Resources, or a local register are identified within or adjacent to the proposed development, the construction limits shall be clearly flagged to ensure impacts to eligible cultural resources are avoided or minimized to the extent feasible. Prior to implementing construction activities, a qualified archaeologist shall verify that the flagging clearly delineates the construction limits and eligible resources to be avoided. Since the location of some eligible cultural resources is confidential, these resources will be flagged as environmentally sensitive areas.
- 5.5-8: To determine the archaeological sensitivity for discretionary projects within the city, an archaeological resources assessment shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology. The assessments shall include a California Historical Resources Information System (CHRIS) records search and a search of the Sacred Lands File (SLF) maintained by the Native American Heritage Commission (NAHC). The records searches shall determine if the proposed project has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A Phase I pedestrian survey shall be undertaken in areas that are undeveloped to locate any surface cultural materials.
 - a. If potentially significant archaeological resources are identified through an archaeological resources assessment, and impacts to these resource cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities to determine significance. If resources determined significant or unique through Phase II testing, and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include a Phase III data recovery program that would be implemented by a qualified archaeologist and shall be performed in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format (1990) and Guidelines for Archaeological Research Designs (1991).

- b. If the archaeological assessment did not identify potentially significant archaeological resources within the proposed General Plan area but indicated the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial onsite safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significant, it shall be curated with a recognized scientific or educational repository.
- c. If the archaeological assessment did not identify potentially significant archaeological resources, but indicates the area to be of medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or education repository.

5.5.1.2 Existing Conditions

According to the background research conducted for the existing General Plan and more recent research for the General Plan Update, the City of Rancho Cucamonga has at least 445 previously identified properties listed in the City's "Historic Site List" dated April 23, 2009; 3 properties listed in the NRHP; 9 properties listed in the CRHR; 3 California Historical Landmarks; and 6 California Points of Historical Interest. Some of these properties are listed below. In addition, there are numerous archaeological sites representing the prehistoric and historic occupation and history of the City that are not publicly disclosed due to confidentiality.

National Register of Historic Places

- Casa de Rancho Cucamonga (John Rains House Museum) at 8810 Hemlock
- Cucamonga Service Station (Multiple Property Listing, Highway 66), 9670 Foothill Boulevard
- Pacific Electric Etiwanda Depot, 7092 Etiwanda Avenue

California Register of Historical Resources

- Padre/Biane Winery, 9951 8th Street (1909)
- Ernst Mueller House, 6563 East Avenue (date unknown)
- James G. Isle House, 6490 Etiwanda Avenue (date unknown, moved to 7086 Etiwanda Avenue)
- Herbert Goerlitz House, 6558 Hermosa Avenue/9893 Highland Avenue (1926; moved to 6558 Hermosa Avenue)
- John Rains House Museum, 7869 Vineyard Avenue (1859; currently at 8810 Hemlock Street)
- Christmas House/Whitson House, 9240 Archibald Avenue (1904)
- Cucamonga Chinatown Site, south of San Bernardino Rd between Klusman and Hellman Ave (pre-1919)
- Cucamonga Rancho Winery/Thomas Vineyards, 8916 Foothill Boulevard (1839)
- Milliken Ranch, Arrow Highway and Haven Avenue (ca. 1891)

California Historical Landmarks

- Cucamonga Rancho Winery/Thomas Vineyards, 8916 Foothill Boulevard (1839) (California Historical Landmark No. 490)
- Site of Tapia Adobe, top of Red Hill, approximately 8501 Red Hill Country Club Drive (1839; California Historical Landmark No. 360), demolished. Note: Property is also a local Designated Point of Interest
- Historic Route 66/National Old Trails Highway (California Historic Landmark No. 781)

California Points of Historical Interest

- Base Line Road, Highway from Highland to Claremont (1853; Point of Historical Interest No. SBR-012)
- Cucamonga Chinatown Site, 9591 San Bernardino Road (1920; Point of Historical Interest No. SBR-077)
- Christmas House, 9240 Archibald Avenue (1904; Point of Historical Interest No. SBR-073)
- Garcia Ranch House (currently the Chaffey-Garcia House), 7150 Etiwanda Avenue (1874; Point of Historical Interest No. SBR-082)
- Sycamore Inn (historically Uncle Billy's Tavern), 8318 Foothill Boulevard (1848; Point of Historical Interest No. SBR-070)
- Milliken Ranch, 8798 Haven Avenue (1891; Point of Historical Interest No. SBR-075)

The City has 77 designated local landmarks and 29 designated points of interest. In addition, the City identified 8 properties potentially eligible for listing in the NRHP, which were identified as "potential National Register" properties; 115 properties identified as "Potential Local Landmarks," three of which have been demolished; 24 properties determined insignificant or "Survey Determined Insignificant"; and 154 properties that were listed as "Survey Undetermined Significance."

Eligible for Inclusion in the National Register of Historic Places

Of the recorded properties from the South Central Coastal Information Center records search, several properties appear to be individually eligible for listing in the NRHP, receiving a California Historical Resource Status Code 3S. These resources would also be eligible for listing in the CRHR and for local designation, if not already listed or designated:

- Sam and Alfreda Maloof Compound, 5131 Carnelian Street (APN 106128129)
- Demens-Tolstoy House, 9686 Hillside Road (Assessor's Parcel Number [APN] 106156104)
- Cucamonga Rooming House, 9680 San Bernardino Road (APN: 20813109)
- China House, 9591 San Bernardino Road (APN: 20815124)
- Biane Winery, 9985 8th Street (APNs 20920119/20920120)
- Kincaid Ranch, 9449 9th Street (APN 020903103)
- **W.J. Kincaid House**, 7609 Turner Avenue (APN 107728144)
- Strane House, 7403 Archibald Avenue (APN 107701143)
- Old Stone Church, 7656 Archibald Avenue (APN 020804129)

Eligible for Inclusion in the California Register of Historical Resources

Based on the records search, there were several properties, including four that appear eligible for the NRHP, that appear individually eligible for listing in the CRHR and receive a California Historical Resource Status Code 3CS. The following 10 resources would be eligible for designation in the CRHR and as local landmarks.

- Stone House at 10270 Church Street (APN 107727103)
- Sanchez Home and Winery, 7402 Hermosa Avenue (APN 107703105)
- Jones House, 13232 Victoria Avenue (APN 22706171)
- Mandala Winery, 10277 Foothill Boulevard (APN 20833123)
- Sweeten Hall, formerly Cucamonga Public School, 9324 San Bernardino Road (APN 20811109)
- Scott House, 8555 Grove Avenue (APN 20722203)
- Stone House at 8619 Barker Avenue (APN 20713253)
- Willows School, 8968 Archibald Avenue (APN 20917115)
- Billings House, 7601 Archibald Avenue (APN 107732112)
- Southern Pacific Overcrossing on Foothill Boulevard (APN 20710139)

Local Designation

There are 110 properties that appear individually eligible for local designation and receive a California Historical Resources Status Code of 5S3, which is a property that appears to be individually eligible for local listing or designation through survey evaluation.

Historic Districts and Neighborhood Character Areas

A historic district is a definable, unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. It can be distinguished from surrounding properties and presents the same constraints and opportunities as individually listed properties. Historic districts can be designated at the national, State, and local level.

A neighborhood character area (NCA), also commonly referred to as a conservation district, is a tool used to define a group of significant historic resources that do not retain adequate integrity to qualify as a historic district but still maintain important levels of cultural, historic, or architectural significance. The focus of an NCA is on maintaining basic community character of an area.

The neighborhoods of Alta Loma, Cucamonga, and Etiwanda are historic NCAs because each has its own style of development. Moreover, historic landscaping and trees provide reminders of Rancho Cucamonga's agrarian past and highlight the importance of mature landscaping as a design component. Within Rancho Cucamonga, certain types of vegetation also provide a historic link to the city's agricultural past. Stands of eucalyptus tree windrows in Alta Loma and Etiwanda were planted in the late 1800s to protect crops from severe winds. Remaining vineyards and citrus trees enhance the historic rural atmosphere of the city and are historical assets.

Alta Loma

The Alta Loma area encompasses roughly one-quarter of Rancho Cucamonga and is bordered by the city boundary to the north and west, Deer Creek to the east, and Base Line Road to the south. This area is characterized by stable neighborhoods, established single-family homes situated on half-acre, equestrian-oriented lots in the northern portion and quarter-acre lots to the south. The neighborhood contains a variety of multifamily housing complexes that are situated along the major boulevards in the southern portion.

Cucamonga

The Cucamonga area encompasses roughly one-quarter of Rancho Cucamonga and is bordered by Base Line Road to the north, Deer Creek Channel to the east, and the city boundary to the west and south. This area contains a stable mix of single-family and multifamily housing. This area also contains the Red Hill area—distinguished by hillside terrain, a nontraditional street layout, a wide mix of lot sizes, and anchored by the Red Hill Country Club.

Etiwanda

The Etiwanda area is along the eastern portion of Rancho Cucamonga and is bordered by the city boundary to the north and east, Day Creek Channel to the west, and Foothill Boulevard to the south. The Etiwanda Specific Plan was developed to retain the rural character of the area and equestrian-oriented residential development. The area is characterized by stable residential neighborhoods surrounded by eucalyptus windrows reminiscent of the agricultural

heritage of the area. Residential uses include a mix of one-acre, one-half-acre, and one-quarteracre residential lots, with the larger lots suitable for equestrian uses.

Latino Community of North Town

The North Town area is in the southern portion of Rancho Cucamonga and surrounds Eighth Street and the Burlington Northern Santa Fe Railway. The North Town area is bordered by Ninth Street to the north, Haven Avenue to the east, Hellman Avenue to the west, and Seventh Street to the south. The Latino community of North Town specifically includes properties between Hermosa Avenue to the west and Marine Avenue to the east, and the Deer Creek Channel runs through the neighborhood. The neighborhood contains single-family homes, a modern suburban street layout, and standard lot sizes. Secondo Guasti purchased eight square miles of land in the Cucamonga Valley in the early 1900s and founded the Italian Vineyard Company. Many of the laborers of Guasti's vineyard lived in the town north of it, and the area was known as North Cucamonga or Northtown even though it is in southern Rancho Cucamonga. The neighborhood dates back to the 1900s and is anchored by the Northtown Community Center.

Red Hill

This area is within the Cucamonga area and is distinguished by hillside terrain, a nontraditional street layout, and a wide mix of lot sizes, and it is anchored by the Red Hill Country Club. This area includes the historic residential neighborhood on Red Hill. These residences were constructed beginning in the late 1930s and are northeast of the Red Hill Country Club and Golf Course.

Bear Gulch Area of Foothill Blvd/Route 66

The Bear Gulch area is in the western portion of Rancho Cucamonga and at the base of the Red Hill area. The Bear Gulch area is bordered by the city boundary to the west and the Cucamonga Creek Channel to the east. This area has commercial properties on either side of Foothill Blvd/Route 66 and is anchored by Sycamore Inn. The Sycamore Inn overlooks the historic Route 66, which was previously the Santa Fe Trail. This area contains groves of cottonwoods, willows, sycamores, and natural drainages. The area was named the Arroyo Los Oso by the Spaniards, which was translated to Bear Gulch, because of the California bears that meandered the creeks.

Cucamonga Vineyard Tract Subdivision B, Tract No. 5576

The Cucamonga Vineyard Tract Subdivision B, Tract No. 5576 area includes Hellman Avenue, San Bernardino Road, Harvard Street, Montara Avenue, and Selma Avenue. This area contains post-war tract housing, is one block north of Route 66, and contains single-family housing, a modern suburban street layout, and standard lot sizes.

Tract Nos. 5591, 5593, and 8892

The Tract Nos. 5591, 5593, and 8892 areas include Effen Street, Dorest Street, Stafford Street, Hermosa Avenue, Center Avenue, Ashford Street, Norwick Street, and Kinlock Avenue. This area contains post-war tract housing. This area is north of Route 66 and south of Church Street. This area contains single-family housing, a traditional street layout, and standard lot sizes.

Figure 5.5-1, *Building Age, Pre-1970,* and Figure 5.5-2, *Building Age, 1970–2019,* show the locations of buildings built before and after 1970.

Archeological Resources

Early History

For a discussion of Native American resources, see section 5.18, *Tribal Cultural Resources*.

Juan Rodriguez Cabrillo sailed along the California coast in 1542, stopping only at San Diego and the Channel Islands and, according to available records, was the first European to come into contact with the Gabrielino. Mission San Gabriel, in Los Angeles County, was founded in September 1771, and all the Native Americans from the Los Angeles plain were persuaded to settle in its vicinity. During much of the Spanish-American period, the San Bernardino Valley was under the control of the Mission. When the mission system was secularized in the 1830s, the 13,000-acre Spanish land grant of Rancho Cucamonga was awarded to Tiburcio Tapia in 1839 (Rancho Cucamonga 2010).

The Mexican-American War ended on February 2, 1848, with the signing of the Treaty of Guadalupe Hidalgo. The treaty established California as a United States possession and provided for the retention of private lands held by the conquered Mexicans. In 1851, the United States required that the courts approve all Hispanic land grants; however, many of the land grants were not approved, and many of the larger ranchos were divided (Rancho Cucamonga 2010).

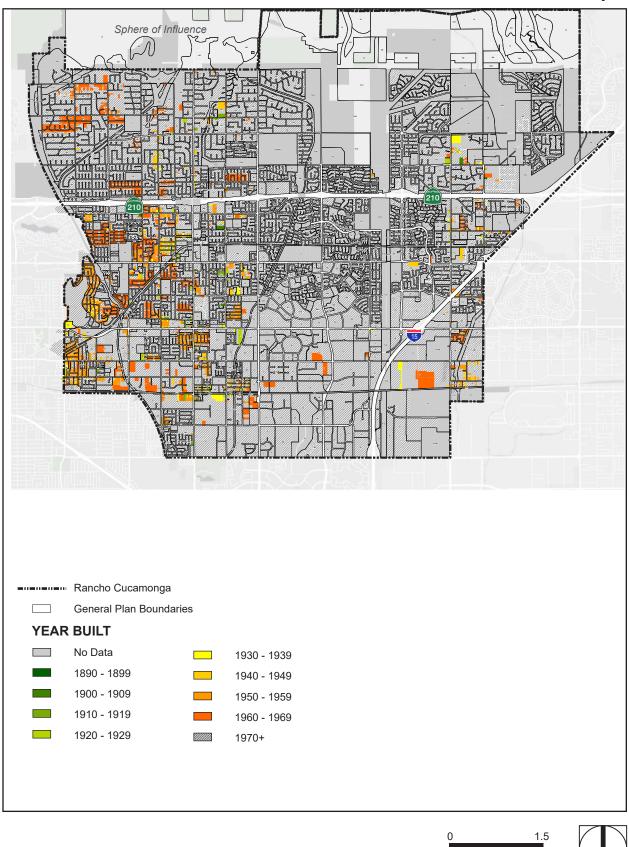
Historic Context

The City of Rancho Cucamonga was incorporated in 1977, consolidating the three towns of Cucamonga, Alta Loma, and Etiwanda into one municipality. Given its fertile soil, temperate climate, and access to an ample supply of water, agriculture developed as the main industry in Rancho Cucamonga beginning in the latter half of the 19th century, when farmers and vintners began producing a variety of crops, particularly citrus fruits and grapes for wine making. Although the local agriculture industry has changed over time due to a variety of factors, including technological advancement and transportation improvements, agriculture remains a recognizable, if fading, feature of Rancho Cucamonga's physical landscape (Rancho Cucamonga 2010).

Rancho Cucamonga has been a center of land development opportunity since Franciscan priests and Spanish soldiers entered and began their occupation of the area in the late 18th century. The name "Cucamonga," a Shoshone word for "sandy place," first appeared in a written record of the San Gabriel Mission dated 1811. As a result of the secularization of the missions in 1831, the land owned by the missions was divided into land grants, including the 13,000-acre Rancho Cucamonga, granted to Los Angeles City Council president and businessman Tiburcio Tapia in 1839. The Rancho Cucamonga was defined by El Camino Real on its southern border, the San Gabriel Mountains to the north, the San Antonio Creek to the west, and present-day Etiwanda Avenue to the east. Tapia built his home on the top of visually prominent Red Hill, planted some of Rancho Cucamonga's first vineyards, and built a small winery, which would later be enlarged and reestablished as the Thomas Winery in 1933 and then again as the Filippi Vineyards winery in 1967. Portions of the historic winery buildings, located at the northeast corner of Foothill Boulevard and Vineyard Avenue, are currently being reused for commercial purposes (Rancho Cucamonga 2010).

Upon the death of Tapia in 1845, Tapia's daughter, Maria Merced Tapia de Prudhomme, became the sole heir of the Rancho Cucamonga. Maria Merced's husband, Leon Victor Prudhomme, assumed control of the rancho and eventually sold it to John Rains in 1858. Rains significantly expanded the vineyards, planting approximately 125,000 to 150,000 vines. He was found murdered in 1862 and soon after his death, his widow, Dona Maria Merced Williams de Rains, inherited the ranch property. She encountered financial problems and the property fell into foreclosure, ultimately marking the close of the rancho way of life in the Cucamonga region (Rancho Cucamonga 2010).

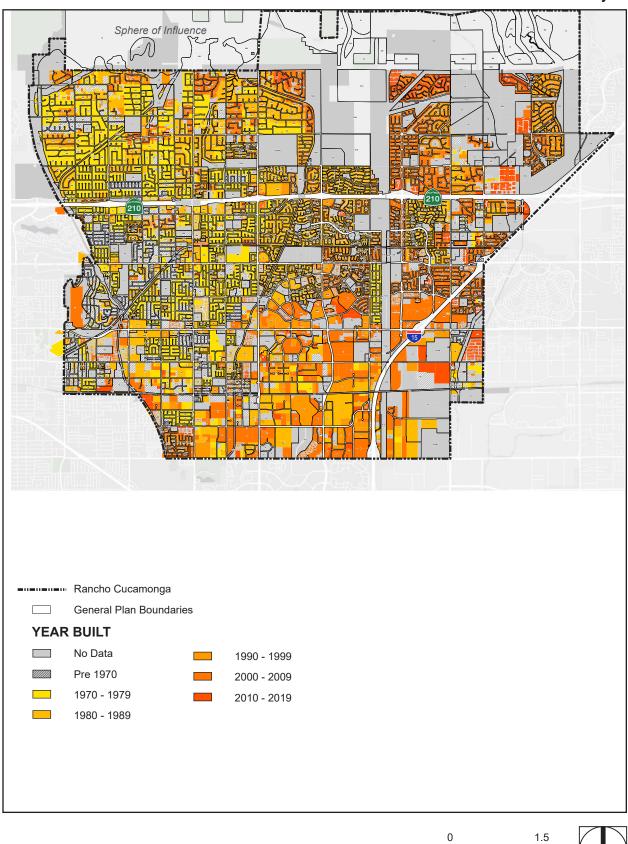
Figure 5.5-1 - Building Age - Pre 1970 5. Environmental Analysis



Scale (Miles)

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Figure 5.5-2 - Building Age - 1970-2019 5. Environmental Analysis



Source: City of Rancho Cucamonga

Scale (Miles)

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5.5.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.

5.5.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following elements of the proposed General Plan discuss the historic resources in the city.

Land Use and Community Design Element

- **GOAL LC-1: A CITY OF PLACES.** A beautiful city with a diversity and balance of unique and well-connected places.
- LC-1.2: Quality of Place. Ensure that new infill development is compatible with the existing, historic, and envisioned future character and scale of each neighborhood.
- **LD-1.12:** Adaptive Reuse. Support the adaptive reuse of historic properties consistent with neighborhood character.

Conservation Element

- **GOAL RC-4: CULTURAL RESOURCES**. A community rich with historic and cultural resources.
- **RC-4.1: Disturbance of Human Remains.** In areas where there is a high chance that human remains may be present, the City will require proposed projects to conduct a survey to establish occurrence of human remains, and measures to prevent impacts to human remains if found.
- **RC-4.2: Discovery of Human Remains.** Require that any human remains discovered during implementation of public and private projects within the City be treated with respect and dignity and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.
- **RC-4.3: Protected Sites.** Require sites with significant cultural resources to be protected.

- **RC-4.4: Preservation of Historic Resources.** Encourage the preservation of historic resources, buildings, and landscape.
- **RC-4.5: Historic Buildings.** Encourage the rehabilitation and reuse of older buildings.

5.5.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.5-1: Buildout of the City of Rancho Cucamonga General Plan could impact historic resources. [Threshold C-1]

There are at least 445 previously identified properties in the City's "Historic Site List," 3 properties listed in the NRHP, 9 properties listed in the CRHR, 3 California Historical Landmarks, and 6 California Points of Historical Interest. The City has 77 designated local landmarks and 29 designated points of interest. The City identified 8 properties potentially eligible for listing in the NRHP that were identified as "Potential National Register" properties; 115 properties identified as "Potential Local Landmarks," 3 of which have been demolished; 24 properties determined insignificant or "Survey Determined Insignificant"; and 154 properties that were listed as "Survey Undetermined Significant." There are no historical resources in the SOI.

Future development under the proposed General Plan could adversely impact some of these historic resources through changes to accomoate adaptive reuse, removal, or reconstruction. Known or future historic sites or resources listed in the national, California, or local registers maintained by the City would be protected through local ordinances, the General Plan Update policies, and state and federal regulations restricting alteration, relocation, and demolition of historical resources. Compliance with the proposed General Plan Update policies, and state and federal regulations would ensure that development would not result in adverse impacts to identified historic and cultural resources. While the regulations provide a process for recognizing historic buildings and places, they do not prevent the reuse or modification of them.

The General Plan Update is a regulatory document that sets the framework for future growth and development of the city and does not directly result in development. Before any development or redevelopment projects can occur in the city, all such projects are required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Therefore, adoption of the General Plan Update in itself would not lead to demolition or material alteration of any of these historic resources.

However, identified historic structures and sites that are potentially eligible for future historic resources listing may be vulnerable to development activities accompanying infill, redevelopment, or revitalization that would be accommodated by the General Plan Update. For instance, the placement of new buildings adjacent to a historic resource may result in indirect impacts to access, visibility, and visual context, while renovations or modification to historic resources may deteriorate or destroy the characteristics that make those resources

important or unique. With the implementation of Policies LD-1.2 and LD-1.12, visual compatibility would be addressed, but not necessarily assured. In addition, other buildings or structures that could meet the NRHP criteria upon reaching 50 years of age might be impacted by development or redevelopment activity that would be accommodated by the General Plan Update, and construction could damage or destroy as-yet undiscovered resources. Regardless of the implementation of General Plan policies and adherence to state regulations, some historic properties may be significantly affected by implementation of this General Plan. This impact would be potentially significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.5-1 would be potentially significant.

Mitigation Measures

Implementation of standard conditions of approval 5.5-4 through 5.5-7.

Level of Significance After Mitigation: Impact 5.5-1 would be significant and unavoidable.

Impact 5.5-2: Future development in the City that would be accommodated by the General Plan Update could impact known and unknown archaeological resources. [Threshold C-2]

Adoption of the General Plan Update in itself would not directly affect archaeological resources. Long-term implementation of the General Plan Update land use plan could include grading of known and unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that requires more intensive soil excavation than in the past could potentially cause the disturbance of archaeological resources. Therefore, future development that would be accommodated by the General Plan Update could potentially unearth previously unrecorded resources.

There are numerous confidential archaeological sites that represent the prehistoric and historic occupation and history of the city but are not publicly disclosed. The recorded sites include items such as milling stones, flakes tools, bone fragments, chipping waste, scrapers, hammerstones, and various ground stone scatter. Archaeological sites are protected by a wide variety of state policies and regulations under the California Public Resources Code. Cultural resources are also recognized as nonrenewable and therefore receive protection under the California Public Resources Code and CEQA. Review and protection of archaeological resources are afforded by CEQA for individual development projects that would be accommodated by the General Plan Update, subject to discretionary actions that are implemented in accordance with the land use plan of the General Plan Update. According to Public Resources Code Section 21083.2 of CEQA, the lead agency is required to determine whether a development project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on the development project is required to address the issue of those resources.

It is also important to note that the General Plan Update is a regulatory document that sets the framework for future growth and development in the city and does not result in development in and of itself. Before any development or redevelopment activities can occur in the city, they must be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Long-term implementation of the General Plan Update could include grading of unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that require more intensive soil excavation than in the past could potentially cause the disturbance of archaeological resources. Therefore, future development could potentially unearth previously unknown/unrecorded archaeological resources.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.5-2 would be potentially significant.

Mitigation Measures

Implementation of standard condition of approval 5.5-8.

Level of Significance After Mitigation: Impact 5.5-2 would be less than significant.

Impact 5.5-3: Grading activities could potentially disturb human remains. [Threshold C-3]

The General Plan Update include Policies RC-4.1 and RC-4.2, which require measures to prevent impacts to human remains and compliance with the California Native American Graves Protection and Repatriation Act if human remains are found on a project site.

California Health and Safety Code, Section 7050.5; CEQA Section 15064.5; and Public Resources Code, Section 5097.98, mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code, Section 7050.5, requires that if human remains are discovered on a project site, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the 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 Public Resources Code Section 5097.98. If the coroner determines that the remains are not subject to his or her authority and has reason to believe they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Although soil-disturbing activities associated with development in accordance with the General Plan Update could result in the discovery of human remains, compliance with existing law and proposed General Plan policies would ensure that significant impacts to human remains would not occur.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.5-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.5-3 would be less than significant.

5.5.5 CUMULATIVE IMPACTS

The cumulative context associated with the project includes proposed, planned, reasonably foreseeable, and approved projects in the Planning Area and surrounding region. Much development has occurred in the region prior to protections for historic and prehistoric resources. This past urban development in the region has likely resulted in adverse impacts to historical and prehistoric resources, and there is potential for present and future development activities to affect as-yet undiscovered cultural resources and human remains. Federal, State, and local laws provide protections for historical resources, but protection may not always be feasible. For these reasons, the cumulative effects of future development on cultural resources, tribal cultural resources, and human remains are considered significant.

Future development and redevelopment pursuant to the proposed General Plan Update and other development projects in the surrounding area would involve grading and excavation activities on individual sites, which could uncover cultural resources. Compliance with local, state, and federal regulations would reduce impacts on cultural resources as a result of new development or redevelopment projects. For instance, projects would be required to comply with CEQA Guidelines Section 15064.5, which requires the lead agency to determine if discovered resources are unique or historically significant, and if so, to avoid or mitigate impacts to such resources in accordance with the provisions of PRC Section 21083.2.

Though many historic resources remain in the city, many have also been lost as past development has occurred. Because these resources are best understood in the context of the cultural system of which they are a part, adverse effects or negative impacts erode a dwindling resource base. Consequently, the cumulative impact related to historic resources is significant. Although the proposed General Plan includes policies and this EIR includes standard conditions of approval 5.5-4 through 5.5-7, which would reduce impacts on historic resources, impacts could still occur. Therefore, development under the proposed General Plan would result in a cumulatively considerable contribution to the significant cumulative impact on historic resources. This impact is significant and unavoidable.

5.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.5-3 would be less than significant.

Without mitigation, these impacts would be **potentially significant**:

- Impact 5.5-1 Implementation of the General Plan Update would impact historic resources.
- Impact 5.5-2 Implementation of the General Plan Update would impact archaeological resources.
- Cumulative The proposed project could contribute to cumulative impacts to cultural resources.

5.5.7 MITIGATION MEASURES

No feasible mitigation measures.

5.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The above standard conditions of approval require historic assessments by professionals meeting the Secretary of the Interior's Professionally Qualified Standards and treatment of resources to the Secretary of Interior's Standards for the Treatments of Historic Properties. They require construction limits where eligible resources are located on or adjacent to project construction sites. Archaeological resources assessments must be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards and, if resources are discovered, a Phase II Testing and Evaluation investigation must be performed and a Phase III data recovery program may also be required. After implementation of mitigation, potential impacts to archaeological resources (Impact 5.5-2) would be less than significant. However, even with implementation of regulatory requirements and standard conditions of approval identified in this Draft EIR, Impact 5.5-1 would remain significant. Similarly, implementation of the proposed General Plan policies and standard conditions of approval 5.5-7 would reduce impacts on historic resources, but impacts could still occur. The General Plan Update's contribution to cumulative impacts would be considerable and would remain significant.

5.5.9 REFERENCES

Rancho Cucamonga, City of. 2020, June. General Plan Update: Cultural Resources Existing Conditions Report. DEIR Appendix 2-1. This page intentionally left blank.

5.6 ENERGY

This section evaluates the potential for energy-related impacts associated with buildout of the General Plan, consistent with the suggestions in Appendix F of the CEQA Guidelines. Energy service providers within the City include the Rancho Cucamonga Municipal Utility (RCMU) and Southern California Edison (SCE) for electrical service and Southern California Gas Company (SoCalGas) for natural gas.

Chapter Overview

This chapter concludes that energy impacts associated with implementation and operation of land uses accommodated under the General Plan Update would not adversely affect the city and the surrounding environment. Compliance with State regulations, including Building Energy Efficiency Standards, California Green Building Standards Code, California Renewables Portfolio Standard, and Corporate Average Fuel Economy standards, would increase building energy efficiency and vehicle fuel efficiency while reducing building energy demand and transportation-related fuel usage. Implementation of proposed policies of the General Plan Update in conjunction with regulatory requirements would ensure that energy demand associated with growth under the General Plan Update would not be inefficient, wasteful, or unnecessary.

Heart of the Matter

In Rancho Cucamonga, transportation and the generation of electricity account for approximately 95 percent of all greenhouse gas emissions. Therefore, it is important to realize that a reduction in trips and more efficient buildings would result in the largest reduction in greenhouse gas emissions. The General Plan Update includes policies related to land use and transportation planning and design, energy efficiency, and renewable energy that would contribute to minimizing building- and transportation-related energy demands and demands on nonrenewable sources of energy, in order to establish an energy-efficient community that relies primarily on renewable and nonpolluting energy sources. The development envisioned by the General Plan Update is intended to reduce the need to drive by improving access by sidewalk, pathway, and trail, and by arranging land uses close to where people live to give them options for moving around with or without a vehicle. Additionally, compliance with California's energy efficiency regulations would help to meet the State's goals for zero net energy buildings and transportation, as outlined in the Energy Efficiency Strategic Plan.

5.6.1 ENVIRONMENTAL SETTING

Section 21100(b)(3) of CEQA requires that an EIR include a detailed statement setting forth mitigation measures proposed to minimize significant effects on the environment, including but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F of the State CEQA Guidelines states that, in order to ensure that energy implications are considered in project decisions, an EIR should include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F further states that a project's energy consumption and proposed conservation measures may be

addressed, as relevant and applicable, in the Project Description, Environmental Setting, and Impact Analysis portions of technical sections, as well as through mitigation measures and alternatives.

In accordance with Appendixes F and G of the State CEQA Guidelines, this EIR includes relevant information and analyses that address the energy implications of the General Plan Update and summarize its anticipated energy needs, impacts, and conservation measures. Information found herein, as well as related aspects of the update's energy implications, are discussed in greater detail elsewhere in this EIR, including Chapter 3, *Project Description*, and Sections 5.3, *Air Quality*, 5.8, *Greenhouse Gas Emissions*, and 5.17, *Transportation*.

5.6.1.1 Regulatory Background

Federal Regulations

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. The Act sets increased Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2019).

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers were required to cut greenhouse gas (GHG) emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017 to 2025 that will require a fleet average of 54.5 miles per gallon in 2025. While the US Environmental Protection Agency (EPA) is reexamining the 2017–2025 emissions and CAFE standards, a consortium of automakers and California have agreed on a voluntary framework to reduce emissions that can serve as an alternative path forward for clean vehicle standards nationwide. Automakers who agreed to the framework are Ford, Honda, BMW of North America, and Volkswagen Group of America. The framework supports continued annual reductions of vehicle greenhouse gas emissions through the 2026 model year, encourages innovation to accelerate the transition to electric vehicles, and provides industry the certainty needed to make investments and create jobs.

State Regulations

Renewables Portfolio Standard

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

The California Renewables Portfolio Standard (RPS) Program was established in 2002 under SB 1078 (Sher) and 107 (Simitian). The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Initially under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S 14 08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2014 report, the three largest retail energy utilities provided an average of 20.9 percent of its supplies from renewable energy sources. Since 2003, 8,248 megawatts (MW) of renewable energy projects have started operations (CPUC 2016).

Senate Bill 350

SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in 2018 puts California on the path to 100 percent fossil-fuel-free electricity by the year 2045.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which replaces the SB 350 requirement of 45 percent renewable energy by 2027 with the requirement of 50 percent by 2026 and also raises California's RPS requirements for 2050 from 50 percent to 60 percent. SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. The bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

State Alternative Fuels Plan

AB 1007 requires the California Energy Commission (CEC) to prepare a plan to increase the use of alternative fuels in California. The State Alternative fuels plan was prepared by the CEC with the California Air Resources Board and in consultation with other federal, state, and local agencies to reduce petroleum consumption; increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen); reduce GHG emissions; and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels; result in significant improvements in the energy efficiency of vehicles; and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CARB 2013).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California (California Code of Regulations Title 20, Parts 1600–1608). These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2021a).

Title 24, Part 6, Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resource Conservation and Development Commission (now the California Energy Commission or CEC) in June 1977 and most recently revised in 2016 (California Code of Regulations Title 24, Part 6). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The CEC adopted the 2019 Building Energy Efficiency Standards on May 9, 2018, and they went into effect on January 1, 2020.

The 2019 Standards improve upon the previous 2016 Standards for new construction of and additions and alterations to residential and nonresidential buildings. The 2019 Standards move toward cutting energy use in new homes by more than 50 percent and require installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less. The 2019 Standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; and 4) nonresidential lighting requirements (CEC 2018a). Under the 2019 Standards, nonresidential buildings would be 30 percent more energy efficient compared to the 2016 Standards, and single-family homes would be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 Standards (CEC 2018b).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (California Code of Regulations Title 24, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to: 1) reduce GHG emissions from buildings; 2) promote environmentally responsible, cost-effective, healthier places to live and work; 3) reduce energy and water consumption; and 4) respond to the directives by the governor. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2019. On October 3, 2018, the CEC adopted the voluntary standards of the 2019 CALGreen, which became effective on January 1, 2020.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen has requirements for construction site selection; stormwater control during construction; construction waste reduction; indoor water use reduction; materials selection; natural resource conservation; site irrigation conservation; and more. It provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019).

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I Standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles. In January 2012, the California Air Resources Board approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smogforming emissions (CARB 2017).

Local Regulations

City of Rancho Cucamonga Municipal Code

According to Section 15.04.010 of the Rancho Cucamonga Municipal Code, the City has adopted the 2019 Green Building Standards Code. The City of Rancho Cucamonga encourages implementation of the optional provisions of CalGreen, but does not require them (Rancho Cucamonga Development Code Section 17.50.030).

Sustainable Community Action Plan

In April 2017, the City of Rancho Cucamonga released its Sustainable Community Action Plan that summarizes the direction and future goals for sustainability within the City. The vision for the plan is that "Rancho Cucamonga strives to be a model community for health and sustainability. We are committed to making innovative decisions that ensure a high quality of life and access to a safe, clean environment." Policies and actions related to the City's goal of being energy efficient (EE) include (Rancho Cucamonga 2017):

Policy 1: Reduce energy demand by improved efficiency and building design.

Action EE 1.1: Continue to promote programs that encourage users to reduce energy use and increase efficiency.

Action EE 1.4: Promote City-approved third-party programs and financing sources, such as the Property Accessed Clean Energy (PACE) program, to improve energy efficiency of existing buildings and homes.

Action EE 1.7: Expand the Green Business Recognition Program by offering incentives for participating businesses in Rancho Cucamonga.

Action EE 1.8: Support efforts regarding energy disclosure, audits, and/or upgrades at time of sale for residential and commercial properties.

Action EE 1.9: Pursue retrofitting of existing and installing new streetlight, traffic signal, and safety lights with LED fixtures.

Policy 2: Increase the amount of renewable energy use in Rancho Cucamonga.

Action EE 2.1: Offer a citywide resource that complies with all state, local, and third-party incentives, programs, and information regarding renewable energy for residents and businesses to access.

Action EE 2.2: Continue to support and expand the use of renewable energy.

Action EE 2.4: Leverage incentives and rebates to increase renewable energy generation on City-owned facilities and properties.

Action EE 2.5: Install solar panels when feasible on new and existing municipal buildings.

Standard Conditions of Approval

There are no standard conditions of approval that reduce energy consumption.

5.6.1.2 Existing Conditions

Electricity

Southern California Edison

Southern California Edison (SCE) provides electrical service to most of Rancho Cucamonga and its SOI, using numerous power plants throughout California and in other western states. SCE's service area spans much of southern California from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north. Most major electricity transmission lines in this area are maintained by SCE. Total electricity consumption in SCE's service area is in gigawatt-hours (GWh; one GWh is equivalent to one million kilowatt-hours);

it was 105,162 GWh in 2019 (CEC 2021b). Sources of electricity sold by SCE in 2018, the latest year for which data are available, were:

- 36 percent renewable sources
- 4 percent large hydroelectric
- 17 percent natural gas
- 6 percent nuclear
- 37 percent unspecified sources of power—that is, not traceable to specific generation sources (CEC 2019)

Rancho Cucamonga Municipal Utility

RCMU provides electricity to over 2,000 metered businesses and residents in a selected area in the southeastern portion of the City of Rancho Cucamonga. Since 2004, RCMU has served customers with reliable electricity while maintaining lower rates than those charged by the local investor-owned utility, along with excellent customer service. RCMU is committed to increased use of renewable energy resources and sustainable practices that help reduce environmental impacts in Rancho Cucamonga. RCMU is also committed to helping its customers conserve energy through a variety of rebates and incentive programs.

5.6.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.6.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

General Plan goals and policies, including applicable regulatory requirements and conditions of approval for energy impacts, are identified below.

- **RC-6.1 Climate Action Plan**. Maintain and implement a Climate Action Plan (CAP) that provides best management practices for reducing greenhouse gas emissions.
- **RC-6.2 Renewable Energy**. Encourage renewable energy installations and facilitate green technology and business.
- **RC-6.3 Reduce Energy Consumption**. Encourage a reduction in community-wide energy consumption.

RC-6.10	Green Building . Encourage the construction of buildings that are certified LEED or equivalent, emphasizing technologies that reduce GHG emissions.		
RC-7.1	Electric Vehicle (EV) Charging on City Property . As funding is available, encourage the installation of publicly available electric vehicle charging stations at City-owned buildings, facilities, property, and in the public right-of-way.		
RC-7.2	New EV Charging . Require new multifamily residential, commercial, office and industrial development to include charging stations, or include the wiring for them.		
RC-7.3	EV Charging Retrofits . Encourage existing development to retrofit to include charging stations.		
RC-7.4	New Off-Road Equipment . When feasible, require that off-road equipment such as forklifts and yard tugs necessary for the operations of all new commercial and industrial developments be electric or fueled using clean fuel sources.		
RC-7.5	Municipal Vehicle Fleet . Reduce fossil fuel consumption of the City's vehicle fleet by increasing the number of electric or zero emissions vehicles.		
RC-7.6	Efficiency Retrofits . Encourage existing private property owners to implement energy efficiency retrofits during substantial improvement as defined by the California Building Code.		
RC-7.7	Sustainable Design . Encourage sustainable building and site design that meets the standards of Leadership in Energy and Environmental Design (LEED), Sustainable Sites, Living Building Challenge, or similar certification.		
RC-7.8	Farmers Market, Fork to Table . Support microscale agriculture and farmers markets, and similar methods of encouraging locally grown and consumed produce.		
RC-7.9	Passive Solar Design . Require new buildings to incorporate energy efficient building and site design strategies for the arid environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.		

- **RC-7.10** Alternative Energy. Continue to promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.
- **RC-7.11 Community Development Subdivisions**. When reviewing applications for new subdivisions, require residences be oriented along an east-west access, minimizing western sun exposure, to maximize energy efficiency.

- **RC-7.12** Solar Access. Prohibit new development and renovations that impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.
- **RC-7.13 Energy-Efficient Infrastructure**. Whenever possible, use energy-efficient models and technology when replacing or providing new city infrastructure such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.

5.6.4 ENVIRONMENTAL IMPACTS

5.6.4.1 Methodology

Based on CEQA Guidelines Appendix F, Energy Conservation, in order to ensure energy implications are considered in project decisions, EIRs include a discussion of the potential impacts of proposed projects, with particular emphasis on avoiding or reducing wasteful, unnecessary, or inefficient use of energy resources. Environmental effects may include the proposed project's energy requirements and its energy use efficiencies by amount and fuel type during construction and operation; the effects of the proposed project on peak- and baseperiod demands for electricity and other forms of energy; the degree to which the proposed project complies with existing standards; the effects of the proposed project on energy resources; and the proposed project's projected transportation energy use requirements and its overall use of efficient transportation alternatives, if applicable.

5.6.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.6-1: Implementation of the General Plan Update would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. [Threshold E-1]

Short-Term Construction Impacts

Construction of development projects under the General Plan Update would create temporary demands for electricity. Natural gas is not generally required to power construction equipment, and therefore is not anticipated during construction phases. Electricity use would fluctuate according to the phase of construction. Additionally, it is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would not result in substantial electricity usage during construction activities.

Development projects would also temporarily increase demands for energy associated with transportation. Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul

trucks, and construction employee vehicles that would use diesel fuel or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading, would be gas or diesel-powered. In addition, all operation of construction equipment would cease upon completion of project construction. Furthermore, the construction contractors would be required to minimize nonessential idling of construction equipment during construction in accordance with Section 2449 pf 13 CCR Article 4.8, Chapter 9. Such required practices would limit wasteful and unnecessary energy consumption. Projects within the City and SOI would be similar to projects currently in development in Rancho Cucamonga.

Long-Term Impacts During Operation

Operation of new development projects accommodated under the General Plan Update would create demands for electricity and natural gas compared to existing conditions. Operational use of electricity and natural gas would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, use of on-site equipment and appliances; and lighting.

While the electricity and natural gas demand for the city and SOI would increase compared to existing conditions, developments accommodated under the General Plan Update would be required to comply with the current and future updates to the Building Energy Efficiency Standards and CALGreen, which would contribute to reducing the energy demands. New and replacement buildings in compliance with these standards would have greater energy efficiency than existing buildings. It is anticipated that each update to the Building Energy Efficiency Standards and CALGreen would result in greater building energy efficiency and move closer toward buildings achieving zero net energy.

In addition to the Building Energy Efficiency Standards and CALGreen, the General Plan Update includes policies such as Policy RC-6.2, which encourages renewable energy installations; Policy RC-7.2, which requires new multifamily residential, commercial, office, and industrial development to include EV charging stations; and Policy RC-7.9, which requires new buildings to incorporate energy efficient building and site design strategies, to increase energy efficiency and reduce wasteful, inefficient use of energy resources.

Overall, compliance with the Building Energy Efficiency Standards and CALGreen and implementation of proposed energy-related policies to guide development of land uses accommodated under the General Plan Update would help minimize nonrenewable energy demands by increasing energy efficiency and renewable energy use.

Transportation Energy

The city and SOI would consume transportation energy (e.g., gasoline diesel, compressed natural gas, and electricity) during operations from the use of motor vehicles. Implementation of the General Plan Update would generally increase VMT across the different fuel type categories overall when compared to the existing baseline. Increases in VMT would primarily be attributable to the overall growth associated with the General Plan Update. Furthermore, it is anticipated that much of the planned growth would occur in the outlying areas of the city,

as the city center is built out. While VMT fuel usage would generally increase from implementation of the General Plan Update, the fuel efficiency of gasoline- and dieselpowered vehicles under buildout conditions would improve compared to the baseline year. The improvement would be attributable to regulatory compliance (e.g., CAFE standards) that trend toward producing cars that are more fuel efficient and the natural turnover of older, less-fuel-efficient vehicles for newer, more-fuel-efficient vehicles. The CAFE standards are not directly applicable to residents or land use development projects, but to car manufacturers. Therefore, residents and employees of the city and SOI do not have direct control in determining fuel efficiency of vehicles manufacturers would ensure that vehicles produced in future years have greater fuel efficiency and would generally result in an overall benefit to reducing fuel usage by providing the population of the City and SOI more fuel-efficient vehicle options.

Although VMT associated with electric vehicles (EV), and therefore, electricity usage would increase under the with-project horizon year scenario, when compared to the existing baseline, it is also anticipated that EVs would improve in energy efficiency. In conjunction with the regulatory (i.e., RPS, SB 350, and SB 100) and general trend toward increasing the supply and production of energy from renewable sources, it is anticipated that a greater share of electricity used to power EVs would be from renewable sources in future years (e.g., individual photovoltaic systems, purchased electricity from a Community Choice Aggregation, and/or purchased electricity from SCE that is generated from renewable sources).

In addition to regulatory compliance that would contribute to more fuel-efficient vehicles and less demand in fuels, and California Governor's Executive Order N-79-20 mandating zero emissions passenger cars and trucks by 2035, the General Plan Update includes policies that would contribute to minimizing overall VMT, and therefore fuel usage associated with the city and SOI. These proposed policies focus on minimizing VMT through land use and transportation planning efforts that work in conjunction. Additionally, placing residential and nonresidential uses near each other to create self-sustaining communities and neighborhoods could result in shorter distances traveled between where people work and live and to amenities. The shorter distances would reduce VMT by reducing the average vehicle trip distance traveled. It would also encourage people to forego vehicle travel altogether and either bike, walk, or take public transportation, which would also contribute to minimizing VMT.

Summary

Overall, regulatory compliance (e.g., Building Energy Efficiency Standards, CALGreen, RPS, and CAFE standards) would increase building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, the General Plan Update includes policies related to land use and transportation planning and design, energy efficiency, and renewable energy which would contribute to minimizing building- and transportation-related energy demands overall and demands on nonrenewable sources of energy. Implementation of proposed policies of the General Plan Update in conjunction with and complementary to regulatory requirements would ensure that energy demand associated with growth under the General Plan Update would not be inefficient, wasteful, or unnecessary. Therefore, energy impacts associated with implementation and

operation of land uses accommodated under the General Plan Update would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.6-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.6-1 would be less than significant.

Impact 5.6-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy efficiency. [Threshold E-2]

The state's electricity grid is transitioning to renewable energy under California's RPS Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 40 percent by 2024 (SB 350), 50 by 2026 (SB 100), 60 percent by 2030 (SB 100), and 100 percent by 2045 (SB 100). SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as SCE, whose compliance with RPS requirements would contribute to the State objective of transitioning to renewable energy. The land uses accommodated under the General Plan Update would comply with the current and future iterations of the Building Energy Efficiency Standards and CALGreen. As discussed in Impact 5.6-1, the General Plan Update includes policies which would support the statewide goal of transitioning the electricity grid to renewable sources. Therefore, implementation of the General Plan Update would not conflict or obstruct implementation of California's RPS Program, and impacts would be less than significant.

The City of Rancho Cucamonga does not have its own renewable energy plan; however, the City has prepared a Climate Action Plan as a companion to the General Plan Update that includes goals, strategies, and measures to reduce communitywide and municipal GHG emission reductions in the categories of zero emission and clean fuels, efficient and carbon free buildings, renewable energy and zero carbon electricity, carbon sequestration, local food supply, efficient water use, waste reductions, and sustainable transportation.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.6-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.6-2 would be less than significant.

5.6.5 CUMULATIVE IMPACTS

The areas considered for cumulative impacts to electricity are the service areas of RCMU and SCE, and SoCalGas for natural gas supplies. Future projects would generate increased electricity and natural gas demands. However, all projects within the the service areas would be required to comply with the Building Energy Efficiency Standards and CALGreen, which would contribute to minimizing wasteful energy consumption. Therefore, cumulative impacts would be less than significant, and project's contribution to impacts would not be cumulatively considerable.

5.6.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.6.7 MITIGATION MEASURES

No mitigation measures are required.

5.6.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.6.9 REFERENCES

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5.7 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) describes the existing geological setting and potential impacts of the General Plan Update on the City of Rancho Cucamonga and its sphere of infuence (SOI).

Chapter Overview

Because each building site developed under the General Plan Update would be different, this chapter concludes that the current practice of evaluating a professionally prepared geotechnical study that recommends the type of construction for the building-site soils will remain the most effective way to avoid impacts. Adherence to the California Building Code, the fault line setback policy in the General Plan, and applicable state laws, including the Alguist-Priolo Earthquake Fault Zoning Act, will reduce impacts from earthquakes to a less than significant level. Ground disturbance activities could result in wind and rain erosion and fugitive dust, but dust-control measures required by the County and City in soil erosion control areas would reduce soil erosion from future development and redevelopment. Landslides are likely only in the hilly parts of the city that are rural and often in conservation areas or areas subject to low densities, which are unlikely to see substantial development. Though the potential for landslides may affect hikers on area trails, the overall threat of landslides in the city is considered low. Paleontological resources (fossils) are unlikely because most of the city's soils are too young to include them. However, a discovery is always possible, and if excavation extends below the topsoil, discoveries are more likely. This chapter recommends a standard condition of approval to address the potential for paleontological discovery. Overall, the development impacts to geology and soils are less than significant with application of laws and standard conditions of approval.

Heart of the Matter

Most people do not think of soil unless they are planting a garden or need to build something. We are surrounded by soil and often take it for granted. Once vegetation is removed during construction or grading, soil is prone to erosion by wind and rain. Erosion from rainstorms can send silt downstream, creating large muddy areas, degrading waterways, and inundating roads and other public improvements, causing damage and creating safety hazards. Wind erosion can create health impacts for people with breathing difficulties and reduce visibility through wind-borne dust. Standard development conditions of approval and adherence to City construction standards minimizes but cannot eliminate erosion.

The California Building Code has specific construction requirements to help keep occupants of buildings safe during earthquakes. This chapter relies on the City's adherence to the Building Code to ensure that new construction follows the latest design guidance. Building setbacks from earthquake faults is a policy in the General Plan and is another method that the City uses to keep people safe. While there is nothing in the General Plan that can prevent an earthquake, the construction methods and procedures followed by the City can reduce impacts of earthquakes on people.

5.7.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal Regulations

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 was intended to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program. Pursuant to this act, the National Earthquake Hazards Reduction Program was established, which designates the Federal Emergency Management Agency as the lead agency of the program. The program provides valuable resources to guide building code requirements and planning efforts such as emergency evacuation responsibilities and seismic code standards.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program (under Section 402 of the Clean Water Act), all facilities that discharge pollutants from any point into waters of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTW), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources usually discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect discharges. Municipal sources include POTWs that receive primarily domestic sewage from residential and commercial customers and municipal stormwater runoff. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the US Environmental Protection Agency has recently focused on integrating the NPDES program further into watershed planning and permitting.

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more as well as construction sites one acre or more in size must file for and obtain an NPDES permit. The City of Rancho Cucamonga is subject to a Phase 1 NPDES permit (Order No. R8-2010-0036; NPDES No. CAS 618036). New development would be required to implement erosion and sediment control plans, including appropriate erosion and sediment control best management practices (BMP), Storm Water Pollution Prevention Plans, and water quality management plans, as applicable. Further, projects must ensure, to the maximum extent practicable standard, that runoff from development projects does not cause a nuisance to adjoining or downstream properties and stream channels through appropriate control measures to reduce erosion and maintain stream geomorphology. Projects are also required to emphasize implementation of low-impact development principles, where feasible, and that urban runoff conveyance systems from development projects are appropriately maintained.

State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo (AP) Earthquake Fault Zoning Act of 1972 was intended to mitigate the hazard of surface fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. The Act delineates "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined." The Act also requires that cities and counties withhold development permits for sites within an earthquake fault zone until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. Pursuant to this Act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault.

Seismic Hazards Mapping Act

Earthquakes can cause significant damage even if surface ruptures do not occur. The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Sections 2690 to 2699.6) is intended to protect the public from the hazards of nonsurface fault rupture from earthquakes, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure. The California Geological Survey prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to non-surface fault hazards. Seismic Zone Hazard Maps identify Zones of Required Investigation, which are those with potential seismic hazards. Most developments designed for human occupancy planned within these zones are subject to site-specific geotechnical investigations to identify the hazard. The Act requires responsible agencies to approve projects within seismic hazard zones only after a site-specific investigation to determine if the hazard is present, and the inclusion, if a hazard is found, of appropriate mitigation.

California General Plan Law

State law (Government Code Section 65302) requires cities to adopt a comprehensive longterm general plan that includes a safety element. The safety element is intended to provide guidance for protecting the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; other seismic hazards identified by Public Resources Code Sections 2691 et. seq.; and other geologic hazards known to the legislative body. The safety element must also include mapping of known seismic and geologic hazards from the California Geological Survey and a series of responsive goals, policies, and implementation programs to improve public safety.

Local Regulations

Regional

Santa Ana Region Basin Plan

The City of Rancho Cucamonga is within the Santa Ana River watershed, where the Santa Ana Regional Water Quality Control Board (RWQCB) imposes a density limit for new developments that wish to use on-site septic tanks or subsurface leaching/percolation systems. Chapter 5 of the Santa Ana Region Basin Plan outlines the board's regulations for septic systems, which specifically limit the density of new subsurface systems to lots developed with no more than two dwelling units per acre, and prohibits these systems in specific areas with water quality problems and where public sewer systems are in place. Exemptions to the minimum lot size are granted for replacement systems, residential expansion, and where offsets are made (when a number of existing dwelling units on septic systems are connected to the public sewer system in exchange for an equal number of new units to be placed on septic systems).

County Septic Tank Regulations

Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code contains regulations for the installation, use, and maintenance of sewage holding tanks so as not to affect public health or safety. The County Division of Environmental Health Services (DEHS) is responsible for issuing permits to construct and use septic tanks, as well as for routinely inspecting the tanks for proper operation.

If a sewage collection line becomes available near a property using a septic tank, the property owner is required to connect to the sewer line within 90 days and to abandon the septic tank in accordance with County regulations.

Local

Soil Erosion Control Ordinance

The City has adopted by reference Chapter 1 of Division 2 of Title 6 of the San Bernardino County Code, "Control of Blowing Sand and Soil Erosion" for the purpose of controlling blowing sand and preventing soil erosion by wind within the city limits (Rancho Cucamonga Municipal Code Chapter 8.16). The County has designated the unincorporated areas near Rancho Cucamonga as soil erosion hazard areas, where individual property owners must make reasonable efforts to prevent dust from blowing off their property. A soil erosion permit is required for any ground disturbance (excavating, leveling, cultivating, disking, plowing, removing residues, or spreading a soil) and for recreational use of off-road vehicles, but exempts activities such as roadway or utility line construction and maintenance, land clearing for fire prevention, soil testing, disturbance of one acre or less, use of a Noble blade within a vineyard, and agricultural practices within an agricultural preserve.

Building Codes

Every public agency enforcing building regulations must adopt the provisions of the California Building Codes (CBC), which is Title 24, Part 2 of the California Code of Regulations. The most recent version is the 2019 CBC (effective January 1, 2020). The CBC is updated every three years and provides minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC also contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability of occurring at a site. A city may adopt more restrictive codes than state law based on conditions in their community.

From the City's municipal code (all numbering is from the adopted code):

- Chapter 15.04, Codes Adoption: This chapter adopts the 2019 California Building Codes by reference.
- Chapter 15.42, Earthquake Hazard Reduction in Unreinforced Masonry Buildings: The intent of this chapter is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on unreinforced masonry bearing wall buildings constructed before 1946.
- Chapter 17.52, Hillside Development: This chapter categorizes hillsides into five slope categories and establishes limits on land use density. Additional design standards and guidelines are provided in Article VII (Design Standards and Guidelines), which includes Section 17.120.020, Site Plan Design, which includes Subsection F, that provides general standards and guidelines for grading; and Section 17.122.020, Hillside Development, that provides Hillside Design Standards and Guidelines intended to facilitate the appropriate development of hillside areas and apply within the Hillside Overlay and Hillside Residential District.
- Chapter 19.28, Onsite Wastewater Treatment Systems: This chapter establishes standards for the approval, installation, and operation of onsite wastewater treatment systems within the City of Rancho Cucamonga, consistent with the appropriate California RWQCB standards and basin plans. The standards are adopted to prevent the creation of health hazards and nuisance conditions and to protect surface and groundwater quality.

Standard Conditions of Approval

There are existing regulations that reduce geologic and seismic hazards to structures and infrastructure. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for personal injury and property damage associated with geologic and seismic hazards in the city. Existing regulations that promote public safety during major earthquake events or that prevent exposure to local geologic hazards include the standard conditions listed below.

5.7-1: Development of projects pursuant to the General Plan Update shall comply with the City's modifications to the Alquist-Priolo Earthquake Fault Zone Act that call for geotechnical investigations for all proposed structures designed for human occupancy within the expanded AP Zones, including a zone along a splay of the Cucamonga Fault and another zone along the scarp at Red Hill. Also, geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet.

- **5.7-2:** All future building pads shall be seeded and irrigated for erosion control. Detailed plans shall be included in the landscape and irrigation plans to be submitted for Planning Department approval prior to the issuance of building permits.
- **5.7-3:** A geological report shall be prepared for an individual project by a qualified engineer or geologist and submitted at the time of application for grading plan check.
- **5.7-4:** The final grading plan, appropriate certifications, and compaction reports shall be completed, submitted, and approved by the Building and Safety Official prior to the issuance of building permits.
- 5.7-5: A separate grading plan check submittal is required for all new construction projects and for existing buildings where improvements being proposed will generate 50 cubic yards or more of combined cut and fill. The grading plan shall be prepared, stamped, and signed by a California-registered civil engineer.
- **5.7-6:** A soils report shall be prepared by a qualified engineer licensed by the State of California to perform such work.
- 5.7-7: If any paleontological resource (i.e., plant or animal fossils) is encountered before or during grading, the developer shall retain a qualified paleontologist to monitor construction activities and take appropriate measures to protect or preserve them for study. The paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:
 - Assign a paleontological monitor—trained and equipped to allow the rapid removal of fossils with minimal construction delay—to the site full-time during the interval of earth-disturbing activities.
 - Should fossils be found within an area being cleared or graded, divert earthdisturbing activities elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor shall immediately divert construction and notify the monitor of the find.
 - Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to the San Bernardino County Museum.
 - Submit summary report to City of Rancho Cucamonga. Transfer collected specimens with a copy to the report to San Bernardino County Museum.

Existing Conditions

Rancho Cucamonga is at the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains. The city has a moderately sloping terrain from north to south, although much of the SOI features steep hillsides and rugged terrain. Ground elevations range from approximately 1,015 feet above mean sea level at the southwestern end of the city to approximately 2,200 feet at the northern end of the city. The Chino Valley is bounded by the San Gabriel Mountains to the north, the San Bernardino Mountains to the northeast, the Puente Hills to the southwest, and the Jurupa Hills to the southeast.

These mountains are part of the Transverse Ranges and are composed of igneous and metamorphic rocks that were formed over 65 million years ago. Streams from the mountains carried alluvial deposits into the valley, with deposits consisting of coarse gravels to fine-grained sands deposited more than 10,000 years ago. The alluvial deposits are as thick as 500 to 1,000 feet at the southern edges of the mountains, with deposits southeast of Red Hill nearly 1,400 feet thick. Underneath the alluvial sediments are crystalline rocks, as found exposed in the San Gabriel Mountains north of the city.

Soils

The primary soils in the planning area are: Delhi fine sands, Tujunga soils, Hanford soils, and Soboba soils (Rancho Cucamonga 2010).

- Delhi fine sands (Db) are found in the southern section of the city. These sands are more than 60 inches thick and are highly permeable, so runoff on these soils is very slow. Hazards related to blowing soil for Delhi sands are generally moderate but can be high in unprotected areas. Delhi sands have low shrink-swell potential and are considered nonplastic (i.e., they have no clay content). They have slight limitations for dwellings without basements and septic tank absorption fields, with severe limitations for shallow excavations and sanitary landfills due to side wall stability and rapid permeability, respectively.
- Tujunga loamy sands (TuB) are found at the central and eastern sections of the city. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans. Tujunga soils are highly permeable so runoff on these soils is slow to very slow. Hazards from water erosion are slight, and hazards from wind erosion are moderate to high on bare soils. Tujunga soils have a low shrink-swell potential and are considered nonplastic. They have slight limitations for dwellings without basements and septic tank absorption fields, with severe limitations for shallow excavations and sanitary landfills due to side wall stability and a high level of permeability, respectively.

Some areas with Tujunga gravelly loamy sand (TvC) are also present, which has the same characteristics as TuB soils, except for a higher gravel content (15 to 30 percent by volume).

Hanford soils (HaC) are found at the western section of the city. These soils are about 10 inches thick and have slow to medium runoff potential and slight to moderate erosion hazard when left unprotected. They are slightly acid or neutral throughout and moderately permeable. Hanford soils have low shrink-swell potential and are considered nonplastic. They have slight limitations for dwellings without basements, septic tank absorption fields, and shallow excavations, with severe limitations for sanitary landfills due to moderate permeability.

- Soboba soils that are stony loamy sand (SpC) are found at the northern section of the city and consist of grayish-brown stony loamy sand on the surface, about 10 inches thick, with underlying material of brown very stony loamy sand and very pale brown stony sand about 60 inches thick. These soils are excessively drained and highly permeable. Runoff on these soils is slow and erosion hazard is slight. They have low shrink-swell potential.
- Soboba soils that are gravelly loamy sand (SoC) are found on some areas at the northern section and contain more gravel than SpC soils. Gravel makes up 40 to 60 percent of volume of SoC soils. They generally have the same characteristics, except that runoff is very slow for SoC soils.

In addition to these primary soil types, several other soil types have been mapped in scattered areas in the city. The following soils have low shrink-swell potential. Cieneba and Ramona soils pose severe limitations to septic tank absorption fields (due to the permeability of the soils, depth to water table, and susceptibility to flooding). Cieneba, Hanford, Ramona, and Greenfield soils have a moderate to high erosion hazard (Rancho Cucamonga 2010).

- Hanford sandy loam (HbA)
- Hanford coarse sandy loam (HaD)
- Ramona sandy loam, 2 to 9 percent slopes (RmC)
- Ramona sandy loam, 9 to 15 percent slopes (RmD)
- Ramona sandy loam, 15 to 30 percent slopes (RmE2)
- Greenfield sandy loam, 2 to 9 percent slopes (GtC)
- Greenfield sandy loam, 9 to 15 percent slopes (GtD)
- Psamments and Fluvents (Ps) along creeks and drainage courses
- Cieneba sandy loam (CnD)
- Cieneba Rock outcrop complex (Cr) at the foothills
- Grangeville fine sandy loam (Gs)

Seismicity

Southern California is a seismically active region, with seismic hazards depending on proximity and earthquake potential of nearby active faults and the local geologic and topographic conditions, which can either amplify or attenuate seismic waves. Seismic shaking refers to the movement of the earth's surface resulting from an earthquake. This shaking is typically the primary cause of damage in earthquakes, which generally correlates to the magnitude of the earthquake and proximity to the event's epicenter. The Modified Mercalli Intensity (MMI) scale measures the intensity of seismic shaking based on the amount of observed damage. The MMI scale replaced the Richter Scale, which loses its effectiveness when measuring stronger earthquakes. Since the degree of shaking, and consequently damage, generally decreases as the seismic energy travels farther from the fault rupture's point of origin, different sections of a city or region can report different MMI measurements in different locations. The MMI scale (Table 5.7-1) uses Roman numerals on a 12-point scale for each degree of shaking intensity.

The City of Rancho Cucamonga is in the northern portion of the Peninsular Ranges geomorphic province, just south of the Transverse Ranges province. At the boundary of the provinces are several thrust faults where large-scale crustal disturbance has occurred as the Peninsular Ranges collide with the Transverse Ranges. The closest faults are the Etiwanda

Avenue Fault (also known as the Red Hill Fault) and Cucamonga Fault, shown in Figure 5.7-1, both within the city and SOI. Though these faults are considered active and have the potential to generate earthquakes, the probability of producing a significant event is low. According to the Third Uniform California Earthquake Rupture Forecast, the Cucamonga Fault has an approximately 1.5 percent chance of generating an M6.7 earthquake in the next 30 years. In contrast, within 8 to 12 miles of the city are two of the most active faults in Southern California (San Jacinto and San Andreas). They have a probability of 4 percent and 20 percent, respectively, of rupturing over the same time frame.

Intensity	Description	Effects Observed
I	Instrumental	Felt only by a few people, under especially favorable conditions.
II	Feeble	Felt only by a few people at rest, especially on the upper floors of buildings.
Ш	Slight	Noticeable by people indoors, especially on upper floors, but not always recognized as an earthquake.
IV	Moderate	Felt by many indoors, and by some outdoors. Sleeping people may be awakened. Dishes, windows, and doors are disturbed.
V	Slightly strong	Felt by nearly everyone, and many sleeping people are awakened. Some dishes and windows broken, and unstable objects overturned.
VI	Strong	Felt by everyone. Some heavy furniture is moved, and there is slight damage.
VII	Very strong	Negligible damage in well-built buildings, slight to moderate damage in ordinary buildings, and considerable damage in poorly built structures.
VIII	Destructive	Slight damage in well-built buildings, considerable damage and partial collapse in ordinary buildings, and great damage in poorly built structures.
IX	Ruinous	Considerable damage in specially designed structures. Significant damage and partial collapse in substantial buildings, and buildings are shifted off foundations.
x	Disastrous	Most foundations and buildings with masonry or frames are destroyed, along with some well-built wood structures. Rail lines are bent.
XI	Very disastrous	Most or all masonry structures are destroyed, along with bridges. Rail lines are substantially bent.
XII	Catastrophic	Damage is total. The lines of sight are distorted, and objects are thrown into the air.

Table 5.7-1Modified Mercalli Earthquake Intensity Scale

Geologic Hazards

The geologic hazards in Rancho Cucamonga are directly related to the nearby San Gabriel Mountains. Geologic hazards posed by the mountains include debris flows and rock falls due to erosion of steep slopes, heavy rains, soil collapse, soil expansion, earthquake events, and flooding.

Landslides refer to the ground movement of unstable slopes and include rock falls, deep failure of slopes, and shallow debris flows. Areas with steep slopes, adverse joints, or deep weathering have a potential for failure. Potential landslides or slope failure are expected in areas with steep slopes at the northwestern corner of the city and in the SOI. Slopes steeper than 25 percent are found on Red Hill, along Cucamonga Creek at the city's northwest edge, and at the foothills north of the city (See Figure 5.7-1).

Though the metamorphic basement rock at the hillsides of the city is grossly stable, the steep slopes may cause rocks to fall during an earthquake or intense rainfall. Areas with rock fall hazards are confined to the hillsides at the northern edge of the city and the SOI.

The alluvial fans underlying the city were created by several stream systems from the eastern San Gabriel Mountains. These fans and washes represent debris flow events in the recent geologic period. The San Bernardino County Flood Control District maintains debris basins and flood-control facilities in the area to control debris flows and flooding hazards along the canyons, creeks, and washes. Figure 5.7-1 Rancho Cucamonga Special Study Fault Zones

[This is Figure S-1, page 226, from the Safety Chapter]

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The Santa Ana winds are strong winds that pass through the Cajon Pass from the mountains and the high desert areas north of the pass. These winds have led to the deposit of loose soils in the south-central portion of the city. The dry, unconsolidated condition of loose soils makes them susceptible to collapse, hydroconsolidation, and erosion. Hydroconsolidation or soil collapse is the rearrangement of grains and loss of cementation of water-saturated soils, resulting in sudden and substantial settlement of soils. This often occurs in arid or semiarid environments with wind-laid sands and silts, alluvial fans, and mudflow sediments recently deposited by wind erosion or flash floods. Hazards from collapsible soils are expected in Holocene alluvial fans and washes and in areas overlain by windblown sands in the southcentral section of the city.

Bare soils are also subject to blown sand hazards, especially during ground disturbance, such as grading, excavation, trenching, agricultural tilling, and other activities on open land. Wind erosion damages land and vegetation by causing soil loss, dryness, and deterioration of soil structure, nutrient and productivity loss, air pollution, and sediment transport and deposition.

Expansive soils are soils with a significant amount of clay particles that can shrink or swell with water. When these soils swell, they exert pressure on building foundations and could cause damage. Soils in the city and its SOI have relatively low amounts of clay, and no soil expansion hazards are present.

Ground subsidence is the gradual settling or sinking of the ground, usually associated with the extraction of oil, gas, or groundwater from below the ground surface, or the organic decomposition of peat deposits with a resultant loss in volume. While subsidence may occur throughout an overdrafted basin (when groundwater pumping exceeds recharge of the underlying aquifer), differential displacement and fissures are more readily apparent at and near the valley margin. Thus, damage from regional subsidence may be expected at the valley margins adjacent to the San Gabriel Mountains and Red Hill.

5.7.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- G-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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 Division of Mines and Geology Special Publication 42.)
 - ii) Strong seismic ground shaking.
 - iii) Seismic-related ground failure, including liquefaction.
 - iv) Landslides.
- G-2 Result in substantial soil erosion or the loss of topsoil.

- G-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.
- G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- G-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.
- G-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

5.7.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The Seismic Hazards section of the City's General Plan Safety Element identifies potential seismic hazards and methods to minimize the destructive effects of seismic events. The following General Plan policies are applicable to geology and soils impacts:

- **SE-2: Seismic and Geologic Hazards.** A built environment that minimizes risks from seismic and geologic hazards.
- **SE-2.1: Fault Setbacks.** Require minimum setbacks for structures proposed for human occupancy within State and City Special Study Zones. Setbacks will be based on minimum standards established under State law and recommendations of a Certified Engineering Geologist and/ or Geotechnical Engineer.
- **SE-2.2: Building Functionality.** Require enhanced siting, design, and construction standards that focus on building functionality for new critical public facilities and key essential (private) facilities after a seismic event.
- **SE-2.3: Seismically Vulnerable Buildings.** Prioritize the retrofit of seismically vulnerable buildings (unreinforced masonry, soft-story construction, non-ductile concrete, etc.) as better information and understanding becomes available.
- **SE-2.4: Transfer of Development Rights.** Promote and allow for the use of transfer of development rights in areas of significant seismic and geologic hazards.
- **SE-2.5: Hillside Hazards.** Prioritize regulations and strategies that reduce geologic hazard risk to properties and loss of life.
- **SE-5.3: Soil Transport.** Require properties with high wind-blown soil erosion potential (agricultural operations, construction sites, etc.) prevent soil transport and dust generation.

5.7.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.7-1: Project occupants and visitors would be subject to potential seismic-related hazards. [Threshold G-1 i-iv])

Ground Rupture

The location of the project site and its underlying geology make it likely to experience seismic hazards, including strong seismic shaking, and secondary hazards, like liquefaction. Ground rupture refers to ground surface displacement that can result in structural, roadway, and pipeline damage. The Cucamonga Fault (see Figure 5.7-1) runs east-west along the northern city limits and has the potential for an M7.0 earthquake that can lead to ground rupture along its fault traces. Ground displacements are estimated to be up to nine feet along the fault.

In addition, the Red Hill Fault runs from the northeast around Etiwanda Avenue to the southwest around Red Hill. The Etiwanda Avenue Fault Scarp has potential for an M6.5 earthquake and could pose ground rupture hazards to existing and planned developments along its trace. An earthquake on these faults has the potential for ground rupture hazards to future development and redevelopment (Rancho Cucamonga 2010).

The Earthquake Fault Zone for the Etiwanda Avenue Fault Scarp is designated as Very Low Density Residential (up to two units per acre), Low Density Residential (two to four units per acre), and Neighborhood Commercial in the proposed land use plan. This area consists of large lot residential uses and vacant land. Future development and redevelopment pursuant to the proposed General Plan Update that would be located on a fault trace of the Etiwanda Avenue Fault Scarp would be exposed to ground rupture hazards, including cracks on the ground surface, building foundation and structural damage, roadway cracks, and pipeline breaks.

The Earthquake Fault Zone for the Cucamonga Fault is largely in the SOI and is designated Open Space, Flood Control/Utility Corridor, Hillside Residential, and Very Low Density Residential in the proposed land use plan. This area consists of drainage channels, canyons, vacant land, water tanks, and scattered residences. Again, future residential uses in areas within the Hillside Residential and Very Low Density Residential designations would expose persons and property to ground rupture hazards.

Policy SE 2.1 requires minimum setbacks for structures proposed for human occupancy within State and City Special Study Zones. The setbacks would be required to be based on minimum standards established under State law and recommendations of a Certified Engineering Geologist and/or Geotechnical Engineer. Incorporation of setbacks from the fault trace would avoid ground rupture hazards to future developments. Compliance with standard conditions and policy SE 2.1 would preclude the construction of buildings for human occupancy across the fault trace and would require setbacks from the trace, reducing ground rupture hazards to future development.

Though it is not designated as an Earthquake Hazard Zone by the State, the inferred alignment of the Red Hill Fault across the city (see Figure 5.7-1) may pose ground-rupture hazards to future development and redevelopment. Similarly, unknown portions of the Cucamonga Fault could present surface rupture hazards to future development in the northwestern corner of the city. Future development and redevelopment in these areas may be subject to hazards associated with surface rupture in the event of a major earthquake event on the Red Hill or Cucamonga Faults (Rancho Cucamonga 2010).

The area along the southwestern segment of the Red Hill Fault is considered an Alquist-Priolo Earthquake Fault Zone and an area with potential seismic hazards (see Figure 5.7-1). These designations require future development and redevelopment planned in these zones to be subject to geotechnical investigations for structures designed for human occupancy to determine the exact location of the fault trace, to provide structural setbacks from the trace, and to recommend design approaches for structures and infrastructure to respond to probable earthquake magnitudes.

The buried/uncertain segment of the Red Hill Fault is also considered an area with potential seismic hazards where (1) a potential earthquake fault zone will be created and (2) special geologic investigations will be required for all essential and critical facilities to demonstrate that the site is not threatened by surface displacements from future earthquakes. Critical facilities include fire stations, schools, hospitals, dams and flood-control structures, bridges, communication centers, and other facilities that are needed during an emergency or that would pose unacceptable safety risks to the community if severely damaged.

Compliance with standard conditions and the City's requirements for geotechnical investigations in the City-designated Earthquake Fault Zones (SE 2.1) would reduce ground rupture hazards to future development and redevelopment. In some instances, the geotechnical investigation may result in a need to excavate, bring in soil fill, or change the design of a project to account for seismic events. The extent of construction method or design modifications is dependent upon factors that cannot be known at this time, such as the type of building, occupancy, location, or construction materials. These are all factors that become known at the time of development proposals. Therefore, the requirement that the soils capability and seismic potential be considered in the project design will ensure that the City can evaluate the recommendations prior to any project approval.

Ground Shaking

Ground shaking in the city could occur during an earthquake event on the Cucamonga or Red Hill Fault. The city of Rancho Cucamonga is also located near two of California's most active faults: the San Andreas and San Jacinto Faults. The San Andreas Fault has the probability of generating an M7.3 earthquake, and the San Jacinto Fault has the probability of generating an M6.7 earthquake (Rancho Cucamonga 2010). Ground-shaking hazards associated with earthquake faults in the city, major faults in the region, and other nearby faults could pose hazards to future development and redevelopment under the proposed General Plan Update.

Damage to buildings could occur with ground shaking, which could include structural damage to foundations, frames, walls, and columns and nonstructural damage to windows, chimneys, and ceilings. Larger earthquakes and those of longer duration cause more damage, with some buildings performing more poorly than others (Rancho Cucamonga 2010).

Older buildings are generally more susceptible to ground shaking due to deterioration of building materials and because they were constructed under less stringent building codes. Redevelopment would allow for older buildings to be replaced with new ones that would be built to current building codes, including more stringent seismic design standards. Thus, beneficial effects are expected with redevelopment under the proposed General Plan Update as vulnerable structures are demolished and new structures are built that are more resistant to ground-shaking hazards. In addition, Policy SE-2.3 is intended to prioritize the retrofit of seismically vulnerable buildings (unreinforced masonry, soft-story construction, non-ductile concrete, etc.) as better information and understanding becomes available. Compliance with the CBC and Policy SE 2.3 would allow redevelopment to better withstand ground shaking and avoid or reduce structural and nonstructural damage. In addition, Policy SE-2.2 requires enhanced siting, design, and construction standards that focus on building functionality for new critical public facilities and key essential (private) facilities after a seismic event. Implementation of these policies would reduce hazards from ground shaking on existing and future developments in the city.

Ground Failure

During an earthquake, liquefaction may occur in areas with loose soils and high water tables. Though no liquefaction hazards are known in the city, three small areas in the southwestern portion of the city north of Red Hill have perched water conditions and could be subject to liquefaction (Rancho Cucamonga 2010). Future development and redevelopment under the proposed General Plan Update in these three areas could be exposed to liquefaction hazards. These hazards include soil settlement, loss of bearing capacity in foundation soils, and the buoyant rise of structures, leading to structural distress or failure. Excess hydrostatic pressure may also lead to sand boils, mud spouts, and seepage of water through ground cracks.

In accordance with the CBC, geotechnical investigations for new development and redevelopment would determine on-site geologic conditions and identify appropriate recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic design considerations. Compliance with the CBC would identify potential for liquefaction hazards on individual development sites and the construction of buildings and infrastructure that ensures structural integrity to withstand liquefaction hazards.

Landslides

Earthquake shaking and heavy rain events have the potential to trigger landslides on unstable, sloping land. Rock falls and landslides from the San Gabriel Mountains could affect existing and planned developments at the northern end of the city and in the SOI. Compliance with the recommendations of project-specific geotechnical investigations and the City's Hillside Development Regulations, Section 17.24.070 of the Rancho Cucamonga Municipal Code, would preserve natural slopes and reduce landslide hazards.

Compliance with standard conditions of approval, proposed General Plan policies, and the CBC would ensure impacts related to seismic hazards would be less than significant. No mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.7-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.7-1 would be less than significant.

Impact 5.7-2: Unstable geologic unit or soils conditions, including soil erosion, could result from development of the project. [Thresholds G-2, G-3 and G-4]

The County of San Bernardino includes the City of Rancho Cucamonga in designated Soil Erosion Control Areas. The city is also underlain by soils that have moderate to high erosion hazard and soil blowing hazards. Therefore, future development and redevelopment under the proposed General Plan Update could lead to soil erosion.

The Delhi, Tujunga, Hanford, Cieneba, Ramona, and Greenfield soils underlying the city have moderate to high erosion potential (Rancho Cucamonga 2010). Grading and excavation activities for construction may lead to localized erosion as wind and water carry loose soils offsite. In general, erosion would likely occur in a southerly and southwesterly direction to match the general topography. Implementation of erosion-control measures as required by Chapter 8.16 of the Rancho Cucamonga Municipal Code and standard condition of approval 5.7-1 would allow for the containment of soils on-site and would prevent impacts on adjacent properties. In addition, as described in further detail in Chapter 5.10, Hydrology and Water Quality, of this Draft EIR, the future development would be required to implement construction phase BMPs and post-construction site design, source control, and treatment control measures in accordance with permit requirements. Typical construction BMPs include silt fences, fiber rolls, catch basin inlet protection, water trucks, street sweeping, and stabilization of truck entrance/exits. Any project that disturbs one or more acre of land would also be required by the State Water Resources Control Board to develop and implement a Stormwater Pollution Prevention Plan to control discharges from construction sites. Such a plan would outline drainage areas on a construction site and develop engineering solutions for the controlled detention and outflow of stormwater, which in turn reduces the potential for erosion.

If ground disturbance activities occur during strong Santa Ana wind episodes, it is likely that wind erosion and fugitive dust would be generated. Policy SE 5.3 requires properties with high potential for wind-blown soil erosion (e.g., agricultural operations, construction sites) to prevent soil transport and dust generation through the implementation of specific dust-control measures. The dust-control measures required by the County and City in Soil Erosion Control areas (Chapter 8.16 of the Rancho Cucamonga Municipal Code) include prewatering, prompt revegetation, and use of soil binders, which would reduce impacts associated with soil

blowing and wind erosion. Compliance with the City's and County's erosion-control regulations would reduce soil erosion from future development and redevelopment.

Assuming compliance with Chapter 8.16 of the Rancho Cucamonga Municipal Code and standard condition of approval 5.7-1, future development and redevelopment would not result in significant adverse impacts associated with substantial soil erosion or loss of topsoil. Impacts relating to erosion would be temporary and less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.7-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.7-2 would be less than significant.

Impact 5.7-3: Soil conditions could result in risks to life or property and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. [Thresholds G-3 and G-4]

As shown in General Plan Figure S-2 (see Appendix A), areas subject to potential liquefaction or earthquake-induced landslides are in the northern portion of the city and SOI area. As discussed in Impact 5.7-1, compliance with the recommendations of project-specific geotechnical investigations and the City's Hillside Development Regulations would preserve natural slopes and reduce landslide hazards. Further, also discussed in Impact 5.7-1, the CBC requires geotechnical investigations for new development and redevelopment to determine on-site geologic conditions and identify appropriate recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic design considerations.

Compliance with the CBC would identify potential for hazards related to soil conditions on individual development sites so the project can be designed to reflect site-specific geologic and soils conditions and prevent risks due to lateral spreading, subsidence, liquefaction, or collapse.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.7-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.7-3 would be less than significant.

Impact 5.7-4: Soil conditions may not adequately support septic tanks. [Threshold G-5]

Where existing sewer lines are available, future development and redevelopment would connect to the public sewer system. However, the foothills in the SOI are largely undeveloped, and no sewer lines are present to serve this area. Future developments in the SOI in areas designated as Hillside Residential could utilize on-site septic tank systems. However, upon annexation into the City, these areas would be required to connect to the public sewer system.

Where limitations on septic tank systems could pose hazards to surface and groundwater, standard conditions of approval for future projects would reduce potential impacts. Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code notes that the installation, use, and maintenance of sewage tanks is regulated by the DEHS. DEHS would also routinely inspect the tanks for proper operation. If a sewer line becomes available to a property served by a septic tank, the property owner must connect to the sewer line within 90 days and abandon the septic tank in accordance with County regulations. Chapter 5 of the Santa Ana Region Basin Plan limits septic tanks to lots developed with no more than two dwelling units per acre and prohibits these systems in specific areas with water quality problems and where public sewer systems are in place, consistent with Chapter 5 of the Santa Ana Region Basin Plan. Article 4 of Title 3, Division 3, Chapter 1 of the San Bernardino County Code requires written certification of acceptability, including all supportive information, to be obtained from the San Bernardino County Department of Environmental Health prior to issuance of a building permit.

Implementation of these standard conditions of approval would provide oversight prior to septic system construction as well as maintenance and inspection over the life of the septic system to ensure proper operation, thus reducing the potential for impacts related to septic tanks. These conditions would reduce potential effects to less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.7-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.7-4 would be less than significant.

Impact 5.7-5: The project would not directly or indirectly destroy a unique paleontological resource or unique geologic feature. [Threshold G-6]

Research performed at the Natural History Museum of Los Angeles County indicates that the bulk of the study area consists of surficial sedimentary or metamorphic rocks that are unlikely to contain significant vertebrate fossils; however, there may be sedimentary deposits at a greater depth (Rancho Cucamonga 2010). Alluvial deposits extend throughout the plan area. Though shallow excavations in the younger Quaternary alluvium are unlikely to expose significant fossils, deeper excavations that extend into older Quaternary deposits could encounter significant fossils.

The presence of sedimentary units known to contain fossil materials indicates that there is a potential for encountering unidentified paleontological resources during excavation and construction of future development projects. Therefore, this is considered a potentially significant impact on paleontological resources. Implementation of standard condition of approval 5.7-7 would reduce potential impacts to less than significant levels.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.7-5 would be potentially significant.

Mitigation Measures:

Implementation of standard condition of approval 5.7-7.

Level of Significance After Mitigation: Impact 5.7-5 would be less than significant.

5.7.5 CUMULATIVE IMPACTS

The geographic context for the analysis of impacts resulting from geologic hazards generally is site specific rather than cumulative in nature, because each project site has a different set of geologic considerations that would be subject to uniform site development and construction standards and unique standards depending on the outcome of a project-specific geotechnical study. Therefore, the potential for cumulative impacts is limited.

Future development and redevelopment pursuant to the proposed General Plan Update and other development projects in the surrounding area would involve grading and excavation activities on individual sites, which would result in changes to the area's existing topography. Development sites that are relatively flat would remain flat, and hillside development may require cut and fill, manufactured slopes, and changes to the natural topography. Compliance with the CBC and the recommendations of individual geotechnical investigations would reduce geologic hazards to new development (standard condition of approval 5.7-4).

Earthquake faults in the city and SOI could pose surface rupture hazards to developments proposed over the fault traces. However, compliance with the Alquist-Priolo Act and the City's Alquist-Priolo modifications would minimize surface rupture hazards to new development and redevelopment in and near the city (as required by standard conditions of approval 5.7-3 and 5.7-4).

Ground shaking hazards due to regional earthquake events could lead to the damage of buildings, parking lots, and utility lines and subsequent fires, falling objects, and other structural hazards that could cause property damage and personal injuries. These ground-shaking hazards are not unlike the potential hazards in other areas of the region. Depending on the magnitude of the earthquake, distance to the development site, underlying soil conditions, and strength of structures and infrastructure, ground-shaking hazards may be significant.

Future development and redevelopment in the city and the surrounding area would be designed and built in accordance with applicable standards in the CBC, including pertinent seismic design criteria. Existing buildings to be reused would be rehabilitated in accordance with the CBC and local building regulations (as required by standard condition of approval 5.7-4). This would allow structures to withstand ground shaking and to maintain hazards at acceptable levels.

Site-specific geologic hazards would be addressed by the geotechnical investigation required by individual cities and the County for each development proposal. This investigation would identify the geologic and seismic characteristics on a site and provide guidelines for engineering design and construction to ensure the structural integrity of proposed development. Compliance of individual projects with the recommendations of the geotechnical investigation would prevent hazards associated with unstable soils, landslide potential, lateral spreading, liquefaction, soil collapse, expansive soil, soil erosion, and other geologic issues. No cumulative adverse impacts are expected.

Future development and redevelopment would connect to a public sewer system where available, but those areas in the SOI that are under County of San Bernardino jurisdiction may use septic tanks or alternative wastewater disposal systems in areas without sewer service. Compliance with the RWQCB regulations and the County of San Bernardino's Septic Tank Regulations would prevent hazards associated with soils incapable of supporting septic systems.

Adherence to relevant plans, codes, and regulations with respect to project design and construction would provide adequate levels of safety in the city of Rancho Cucamonga and surrounding areas. Such adherence would ensure that the proposed project would not result in a cumulatively considerable contribution to cumulative impacts related to geologic and soil condition. Therefore, the cumulative impact would be less than significant.

Although a project in conjunction with the effects of past projects, other current projects, and probable future projects may result in the disturbance of paleontological resources throughout the region, this Draft EIR identified standard condition of approval 5.7-7 to reduce potential project-specific effects on paleontological resources. Therefore, the mitigation identified for use if unknown or undocumented resources are discovered would reduce the project's contribution to potential cumulative impacts. The cumulative impact on paleontological resources would be less than significant with mitigation.

5.7.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, these impacts would be less than significant: 5.7-1, 5.7-2, 5.7-3, 5.7-4, and 5.7-4.

5.7.7 MITIGATION MEASURES

No additional mitigation measures are required.

5.7.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.7.9 REFERENCES

Rancho Cucamonga, City of. 2010. Rancho Cucamonga 2010 General Plan Update.

5.8 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the emissions attributable to the City of Rancho Cucamonga General Plan Update, and the potential for implementation of the General Plan Update to cumulatively contribute to greenhouse gas (GHG) emissions impacts. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (South Coast AQMD). Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis. The analysis in this section is based in part on the following information:

- City of Rancho Cucamonga General Plan Update: PLAN RC Greenhouse Gas Emissions and Climate Change Vulnerability Assessment Existing Conditions Report, May 2020
- Administrative Draft Climate Action Plan (CAP), September 2021

A complete copy of these studies are included as Appendix 2-1 and Appendix 5.8-1, respectively, to this DEIR.

Terminology

The following are definitions for terms used throughout this section.

- **Greenhouse gases (GHG).** Gases in the atmosphere that absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- Global warming potential (GWP). Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO₂) over a given period of time (20, 100, and 500 years). CO₂ has a GWP of 1.
- Carbon dioxide-equivalent (CO₂e). The standard unit to measure the amount of GHGs in terms of the amount of CO₂ that would cause the same amount of warming. CO₂e is based on the GWP ratios between the various GHGs relative to CO₂.
- MTCO₂e. Metric ton of CO₂e.
- **MMTCO₂e.** Million metric tons of CO₂e.

Chapter Overview

Implementation of the General Plan Update will result in growth of population and the development of new residential and nonresidential projects. Proposed development under the General Plan Update would require construction and operation activities that would result in greenhouse gas emissions that would potentially contribute to climate change. Construction projects typically involve the use of heavy-duty equipment, construction worker commute trips, and material deliveries. These activities would result in GHG emissions for the duration of any given project. Additionally, long-term operational sources of GHG emissions associated with the General Plan Update would include mobile sources (e.g., vehicle exhaust), energy consumption (e.g., electricity and natural gas), solid waste (e.g., emissions that would occur at a landfill associated with solid waste decomposition), wastewater treatment, and water consumption (e.g., electricity used to deliver and treat water consumed by customers in the city). However, this chapter concludes that State and federal legislative actions that will be

implemented in the future to help reduce GHG emissions from transportation and energy use in the city would reduce overall GHG emissions. Additionally, the General Plan Update includes goals and policies that would further support reductions in emissions from existing and future activities in the city despite growth and development.

Heart of the Matter

GHGs contribute to climate change, which affects everyone. Scientific consensus holds that the world's population is releasing GHGs faster than the earth's natural systems can absorb them. These gases are released as byproducts of fossil fuel combustion, waste disposal, industrial processes, land-use changes, and other human activities.

Climate change associated with GHGs may worsen air quality with rising temperatures that will result in more ground-level ozone formation and more ozone accumulating in the air. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system. A larger number of extreme heat days and heat wave events may result, when air quality standards are exceeded, and more frequent regional wildfire events that will produce substantial amounts of smoke that contains unhealthy particulate matter.

The State and much of the world are actively trying to reduce GHGs to slow climate change. The GHG generation for the city is like that of the State, with transportation and building energy contributing most of the impact. It is important then, to realize that a reduction in trips and more efficient buildings will result in the largest reduction in GHG emissions. As the climate continues to change, we can anticipate more severe weather, longer droughts, hotter heat waves, and more severe storms.

5.8.1 ENVIRONMENTAL SETTING

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. The IPCC identified other GHGs that contribute to global warming to a lesser extent—nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).^{1,2} The major GHGs are briefly described below.

- Carbon dioxide (CO₂) enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal) solid waste, trees and wood products, and respiration, and also a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- Methane (CH₄) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- Nitrous oxide (N₂O) is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have a stronger greenhouse effect than others. These are referred to as high-GWP gases. The GWP of GHG emissions are shown in Table 5.8-1, *GHG Emissions and their Relative Global Warming Potential Compared to CO*₂. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under the IPCC Assessment Report's (AR5) GWP values for CH₄, a project that generates 10 MT of CH₄ would be equivalent to 280 MT of CO₂.

¹ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, because it is considered part of the feedback loop rather than a primary cause of change.

² Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017). However, state and national GHG inventories do not include black carbon yet due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

Table 5.8-1GHG Emissions and Their Relative Global Warming Potential Compared to
CO2

Carbon Dioxide (CO ₂)	Methane ¹ (CH ₄)	Nitrous Oxide (N ₂ O)
50 to 200	12 (<u>+</u> 3)	120
1	21	310
		•
50 to 200	12	114
1	25	298
50 to 200	12	121
1	28	265
	Dioxide (CO2) 50 to 200 1 50 to 200 1	Dioxide (CO ₂) (CH ₄) 50 to 200 12 (±3) 1 21 50 to 200 12 1 25 50 to 200 12 50 to 200 12 50 to 200 12 1 25 50 to 200 12

Sources: IPCC 1995, 2007, 2013.

¹ The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

 $^{2}\,$ Based on 100-year time horizon of the GWP of the air pollutant compared to CO2.

California's GHG Sources and Relative Contribution

In 2019, the statewide GHG emission inventory was updated for 2000 to 2017 emissions using the GWPs in IPCC's AR4.⁴ Based on these GWPs, California produced 424.10 MMTCO₂e GHG emissions in 2017. California's transportation sector was the single largest generator of GHG emissions, producing 40.1 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.7 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (9.7 percent), agriculture and forestry (7.6 percent), high-GWP GHGs (4.7 percent), and recycling and waste (2.1 percent) (CARB 2019a).

California's GHG emissions have followed a declining trend since 2007. In 2017, emissions from routine GHG-emitting activities statewide were 424 MMTCO₂e, 5 MMTCO₂e lower than 2016 levels. This represents an overall decrease of 14 percent since peak levels in 2004 and 7 MMTCO₂e below the 1990 level and the state's 2020 GHG target. During the 2000 to 2017 period, per capita GHG emissions in California continued to drop from a peak in 2001 of 14.0 MTCO₂e per capita to 10.5 MTCO₂e per capita in 2019, a 25 percent decrease (CARB 2021). Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) is declining, representing a 41 percent decline since the 2001 peak, though the state's gross domestic product grew 52 percent during this period. For the first time since California started to track GHG emissions, California uses more electricity from zero-GHG sources (hydro, solar, wind, and nuclear energy) than from sources that use fossil fuel (CARB 2019b).

⁴ Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities.

The amount of CO₂ in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are also hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in frequency of warm spells/heat waves over land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.
- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signs of climate change. Statewide, average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). Global average surface temperatures in 2020 tied with 2016 as the warmest year on record (NASA 2020.). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels (CCCC 2012).

In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) advanced shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). Overall, California has become drier over time, with five of the eight years of severe to extreme drought between 2007 and 2016, with unprecedented dry years in 2014 and 2015 (OEHHA 2018). Statewide precipitation has become increasingly variable from year to year, with the driest consecutive four years from 2012 to 2015 (OEHHA 2018). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards, and departments led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency emissions that have already built up, their long atmosphere lifetimes (see Table 5.8-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.8-2, Summary of GHG Emissions Risks to California, and include risks to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy.

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer
	Fewer extremely cold nights
	Poor air quality made worse
	Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack
	Challenges in securing adequate water supply
	Potential reduction in hydropower
	Loss of winter recreation
Agricultural Impacts	Increasing temperature
	Increasing threats from pests and pathogens
	Expanded ranges of agricultural weeds
	Declining productivity
	Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise
	Increasing coastal floods
	Shrinking beaches
	Worsened impacts on infrastructure

Table 5.8-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Forest and Biological	Increased risk and severity of wildfires
Resource Impacts	Lengthening of the wildfire season
	Movement of forest areas
	Conversion of forest to grassland
	Declining forest productivity
	Increasing threats from pest and pathogens
	Shifting vegetation and species distribution
	Altered timing of migration and mating habits
	Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower
	Increased energy demand

Sources: CEC 2006, 2009, 2012; CRNA 2014.

Specific climate change impacts that could affect the project include:

- Water Resources Impacts. By late this century, all projections show drying, and half of the projections suggest 30-year average precipitation will decline by more than 10 percent below the historical average. This drying trend is caused by an apparent decline in the frequency of rain and snowfall. Even in projections with relatively small or no decline in precipitation, central and southern parts of the state can be expected to be drier from the warming effects alone—the spring snowpack will melt sooner, and the moisture in soils will evaporate during dry summer months (CCCC 2012).
- Wildfire Risks. Earlier snowmelt, higher temperatures, and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. Human activities will continue to be the biggest factor in ignition risk. The number of large fires statewide is estimated to increase by 58 percent to 128 percent above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57 percent to 169 percent, depending on location (CCCC 2012).
- Health Impacts. Many of the gravest threats to public health in California stem from the increase of extreme conditions, principally more frequent, more intense, and longer heat waves. Particular concern centers on the increasing tendency for multiple hot days in succession and heat waves occurring simultaneously in several regions throughout the state. Public health could also be affected by climate change impacts on air quality, food production, the amount and quality of water supplies, energy pricing and availability, and the spread of infectious diseases. Higher temperatures also increase ground-level ozone levels, and wildfires can increase particulate air pollution in the major air basins of California (CCCC 2012).
- Increased Energy Demand. Increases in average temperature and higher frequency of extreme heat events combined with new residential development across the state will drive up the demand for cooling in the increasingly hot and longer summer season and decrease demand for heating in the cooler season. Warmer, drier summers also increase system losses at natural gas plants (reduced efficiency in the electricity generation process at higher temperatures) and hydropower plants (lower reservoir levels). Transmission of

electricity will also be affected by climate change. Transmission lines lose 7 percent to 8 percent of transmitting capacity in high temperatures while needing to transport greater loads. This means that more electricity needs to be produced to make up for the loss in capacity and the growing demand (CCCC 2012).

5.8.1.1 Regulatory Background

Federal Regulations

Federal Clean Air Act

The US Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Ac and its amendments. In 2007, the US Supreme Court ruled that CO_2 is an air pollutant as defined under the Clean Air Act, and the EPA has the authority to regulate emissions of GHGs. The ruling in this case resulted in the EPA taking steps to regulate GHG emissions and lent support for State and local agency efforts to reduce GHG emissions.

Federal Regulations for Vehicle Fuel Economy Standards

In October 2012, the EPA and the National Highway Traffic Safety Administration (NHTSA) issued final rules to reduce GHG emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond. NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon, limiting vehicle emissions to 153 grams of CO₂ per mile for the fleet of cars and lightduty trucks by model year 2025, which represents 5 percent annual increases in fuel economy. On August 24, 2018, the EPA and NHTSA jointly published a notice of proposed rulemaking, "The Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks" (SAFE Rule), which proposed (1) new and amended CO_2 and CAFE standards for passenger cars and light trucks, (2) to withdraw the waiver EPA had previously provided to California for that State's GHG and zero emission vehicle (ZEV) programs under Section 209 of the Clean Air Act, and (3) regulatory text to implement NHTSA's statutory authority to set nationally applicable fuel economy standards to explicitly preempt California's GHG and ZEV programs. On November 26, 2019, Part One of the SAFE Rule (One National Program) became effective, which withdrew California's waiver from EPA and finalized NHTSA's regulatory text related to preemption. On March 31, 2020, EPA and NHTSA announced Part Two of the SAFE Rule, which would set amended fuel economy and CO₂ standards for passenger cars and light trucks for model years 2021 to 2026. These revised CO_2 and CAFE standards would increase in stringency by 1.5 percent per year from model years 2020 to 2026. Part Two was finalized on March 31, 2020, and went into effect on June 29, 2020.

State Regulations

Executive Order S-3-05

In 2005, EO S-3-05 was issued by Governor Schwarzenegger and proclaimed that California is vulnerable to the impacts of climate change. It declared that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established GHG emission targets for the state and identified responsibilities for State agencies in meeting the targets. Specifically, statewide emissions were to be reduced to 2000 levels by 2010, 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Assembly Bill 32

In September 2006, the California Global Warming Solutions Act of 2006, AB 32, was signed into law. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that:

... (a) the statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020. (c) The [CARB] shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020. (California Health and Safety Code, Division 25.5, Part 3, Section 38551)

Executive Order B-30-15

On April 20, 2015, Governor Brown issued EO B-30-15 establishing a California GHG reduction target of 40 percent below 1990 levels by 2030. This EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California's new emission reduction target of 40 percent below 1990 levels by 2030 sets the next interim step in the State's continuing efforts to pursue the long-term target expressed under EO S-3-05 to reach the goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32

In August 2016, SB 32 was signed into law and serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize the California Air Resources Board (CARB) to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the 2030 target established by EO B-30-15, which set the next interim step in the State's continued efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants as well as requirements for greater numbers of ZEVs into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This would be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drive trains and engines. The program's ZEV regulation would require battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations would grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules would be fully implemented, the statewide fleet of new cars and light trucks would emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions than the statewide fleet in 2016. As of November 26, 2020, the State's waiver to implement these standards was revoked through Part One of the SAFE Rule. On March 31, 2020, amended fuel economy and CO₂ standards for passenger cars and light trucks for model years 2021 to 2026 were set through Part Two of the SAFE Rule. Part Two was finalized on March 31, 2020, and went into effect on June 29, 2020.

Senate Bill 100

In 2018, SB 100 increased California's Renewable Energy Portfolio targets to 52 percent renewables by 2027 and 60 percent renewables by 2030. SB 100 also established a new mandate that total retail sales of electricity in California come from eligible renewable energy resources and zero-carbon resources by December 31, 2045.

California Building Energy Efficiency Standards

The California Code of Regulations Title 24, Part 6, is California's energy efficiency standards for residential and nonresidential buildings. Title 24 Part 6 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy-efficiency standards for residential and nonresidential buildings. These standards are typically updated every three years as part of the State's triennial code update schedule and have resulted in substantial gains in energy efficiency in new construction with each code update cycle. For example, the 2013 Title 24 standards that were 23.3 percent more efficient than the 2008 standards for residential construction and 21.8 percent more efficient for nonresidential construction. The 2019 Building Energy Efficiency Standards were adopted by the CEC on May 9, 2018, and took effect on January 1, 2020. They were designed to move the State closer to its zero-net-energy goals for new residential development by requiring all new residences to install enough renewable energy to offset the electricity needs of each residential unit (Section 150.1[c]14). The CEC estimates that the combination of mandatory on-site renewable energy and prescriptively required energy efficiency features will result in new residential construction that uses 53 percent less energy than the previous 2016 standards. Nonresidential buildings are anticipated to reduce energy consumption by 30 percent compared to the 2016 standards, primarily through prescriptive requirements for high-efficiency lighting. The Building Energy Efficiency Standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary in response to local climatologic, geologic, or topographic conditions, provided that these standards are demonstrated to be cost effective and exceed the energy performance required by Title 24 Part 6.

California Integrated Waste Management Act

To minimize the amount of solid waste disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990, which required all cities and counties to divert 25 percent of their solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) required that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939, the Integrated Waste Management Act.

Climate Change Scoping Plan

In December 2008, CARB adopted the first Climate Change Scoping Plan, which contained the main strategies California implemented to achieve the mandate of AB 32 (2006) to reduce statewide GHG emissions to 1990 levels by 2020. CARB has adopted several updates to the Scoping Plan, and the latest version is the 2017 Scoping Plan, which lays out the framework for achieving the mandate to reduce statewide GHG emissions to at least 40 percent below 1990 levels by the end of 2030 (CARB 2017). The 2017 Scoping Plan identifies the GHG reductions needed in each emissions sector to meet the statewide 2030 target. Chapter 5 of the 2017 Scoping Plan includes guidance for local jurisdictions to reduce GHG emissions through local planning and permitting mechanisms. The guidance recommends that local governments evaluate and adopt robust and quantitative locally appropriate GHG reduction goals that align with the statewide per capita targets of no more than 6 $MTCO_2e$ per capita by 2030 and no more than 2 MTCO₂e per capita by 2050. Recognizing that not all statewide emissions can be reduced at the local level, the guidance also states that it is appropriate for local jurisdictions to derive evidence-based per capita local goals based on local emissions sectors and population projections, but they must ensure that these targets are consistent with the methodology used to derive the statewide per capita targets. The guidance notes that local GHG reduction strategies to achieve the statewide targets can be implemented through stand-alone documents such as climate action plans or can be integrated into other planning documents with policies that include GHG emissions reduction targets. Once developed and adopted, these plans and policies, which include locally set GHG goals, can set performance metrics for later projects. Additionally, plans that meet the requirements of Section 15183.5(b) of the CEQA Guidelines can provide local governments with a valuable tool for streamlining project-level environmental review.

Cap-and-Trade Program

The Cap-and-Trade program was developed to reduce GHG emissions from major emissions sources (covered entities) by setting a firm cap on statewide GHG emissions that is gradually reduced over time while employing market mechanisms to cost-effectively achieve the State's emission-reduction goals. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions—including electricity generators; large industrial facilities emitting a specified amount of annual emissions; and distributors of transportation, natural gas, and other fuels—and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program provides approximately 450 covered entities with the flexibility to seek out and implement the lowest cost options to reduce emissions. All covered entities are required to demonstrate compliance with the cap-and-trade program by implementing GHG reduction activities on-site, through use of free or purchased allowances, or purchase of offsets.

Regional Regulations

San Bernardino Regional Greenhouse SB 375 Gas Reduction Plan

The San Bernardino Council of Governments and San Bernardino County Transportation Authority (SBCOG/SBCTA) prepared a 2008 GHG emissions inventory for each partnership city and forecast each city's emissions, including for the City of Rancho Cucamonga, to the year 2020 in the Regional Reduction Plan. In addition to city-specific GHG emissions inventory, the Regional Reduction Plan includes a comprehensive list of measures applicable to the region that were developed by SBCOG/SBCTA and presented to each city to identify measures that would be feasible for implementation locally. Partnership cities selected potential GHG reduction strategies that were used to identify the level of reduction that would help achieve the 2020 emissions reduction target. Through the Regional Reduction Plan, the City selected a goal to reduce community GHG emissions to a level 15 percent below 2008 GHG emissions by 2020. SBCOG/SBCTA completed a more recent Regional GHG Reduction Plan in March 2021. The GHG reduction policies of the Sustainable Community Action Plan have been incorporated into and expanded upon in the General Plan Update and the CAP. Through these policies, GHG emissions in the city were intended to be reduced by:

- Promoting sustainable development that reduces environmental impacts.
- Working toward a sustainable jobs-housing balance.
- Implementing land use patterns and policies that incorporate smart growth practices.
- Reducing operational energy requirements through sustainable and complementary land use patterns.
- Promoting pedestrian-friendly development.
- Supporting development projects that are designed to facilitate convenient access for pedestrians, bicycles, transit, and automobiles.

Resilient IE

The Western Riverside Council of Governments (WRCOG), in partnership with the SBCOG/SBCTA, developed the Resilient IE program to support regional and local efforts to prepare for and mitigate risks associated with climate adaptation and transportation infrastructure. The Resilient IE program includes six primary components:

- Establish a regional climate collaborative, referred to as the Inland Southern California Climate Collaborative (ISC3).
- Revise WRCOG's community vulnerability assessment and establish a vulnerability assessment for San Bernardino County.
- Develop city-level, climate-related transportation hazards and evacuation maps.
- Develop a climate resilient transportation infrastructure guidebook.
- Prepare a regional climate adaptation and resiliency general plan element template.
- Serve as a pilot project to assess the community cost of downed or damaged transportation assets.

Through the development of the San Bernardino County Vulnerability Assessment and Adaptation Strategies, the Resilient IE program includes a vulnerability assessment that summarizes projected climate change-related hazards that would affect its county and cities. The project also includes a summary of climate change adaptation measures developed through a regional context for consideration by local agencies to implement in their own plans.

Local Regulations

Rancho Cucamonga Sustainable Community Action Plan

The City adopted a sustainable community action plan (SAP) in 2017 but it was not a qualified climate action plan. The SAP uses the inventory and forecasts prepared through the Regional Reduction Plan to aspire to reduce GHG emissions 15 percent below 2008 levels by 2020. The City's SAP is a visionary document that identified a menu of goals and actions the City could take locally to reduce citywide GHG emissions in key topical areas, including transportation and mobility, land use and open space, energy efficiency and renewables, green building performance, water and wastewater, and waste and recycling.

Standard Conditions of Approval

There are no standard conditions of approval that reduce greenhouse gas emissions.

5.8.1.2 Existing Conditions

The city is already experiencing the impacts of global climate change as a result of human activities that generate GHG emissions. These changes include warming average temperatures and increased volatility in precipitation patterns. Emissions in the City and SOI come from the following sources:

- **Transportation:** Emissions from vehicle trips beginning and ending in the city and SOI and from external/internal vehicle trips (i.e., trips that either begin or end in the city or SOI).
- **Energy:** Emissions generated from purchased electricity and natural gas consumption used for cooking and heating in the city and SOI.
- Solid Waste Disposal: Indirect emissions from waste generated in the city and SOI.
- **Water/Wastewater:** Emissions from electricity used to supply, treat, and distribute water based on the overall water demand and wastewater generation in the city and SOI.
- Area Sources: Emissions generated from use of light-commercial, agricultural, and construction equipment in the city and SOI.

Life-cycle emissions include indirect emissions associated with materials manufacture, but they involve numerous parties, each of which is responsible for GHG emissions of its particular activity. The California Natural Resources Agency, in adopting the CEQA Guidelines Amendments for GHG emissions, found that life-cycle analysis was not warranted for projectspecific CEQA analysis in most situations for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials that would be consumed during operation or construction phases of buildout of the General Plan is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life-cycle emissions would be speculative. A life-cycle analysis is not warranted.

The City prepared an inventory of existing communitywide GHG emissions for 2018. The inventory required calculations and data analysis, so although the inventory is for 2018, the calculations and development of the inventory was prepared in 2020 and finalized in 2021. The inventory results are provided in Table 5.8-3, *Existing Communitywide GHG Emissions Inventory (2018)*. This inventory includes GHG emissions from all activity sectors—transportation, building energy, off-road equipment, solid waste, agriculture, water, and wastewater. Nearly all (approximately 96 percent) of community-wide emissions in 2018 were from the sectors of on-road transportation and building energy use. Consistent with guidance from the Governor's Office of Planning and Research, the 2018 community-wide GHG inventory was prepared using the "U.S. Community Protocol for Accounting and Reporting of GHG Emissions," version 1.1 (ICLEI 2013). The full GHG inventory is in Appendix A of the CAP.

Sector	Communitywide GHG Emissions (MTCO₂e)	% of total ¹
On-Road Transportation	729,617	51
Building Energy	634,699	45
Solid Waste	28,632	2
Water	18,650	1
Off-Road Equipment	12,405	1
Wastewater	2,454	0.2
Agriculture	300	<0.1
Total	1,426,757	100

Table 5.8-3 Existing Communitywide GHG Emissions Inventory (2018)

Source: Data and calculations, Ascent Environmental 2021.

1 Percentages may not add to 100 percent due to rounding.

Targets

The CAP sets communitywide GHG emissions reduction targets for the city for the years 2030 and 2040. The City has established a target for 2030 to align with the State legislative reduction target of SB 32 and for 2040 because that is the horizon year of the General Plan Update. (There is no State GHG reduction target for 2040.) The 2040 interim target was derived by calculating the trend of emissions reductions that would be needed in the city by 2040 to reduce emissions 80 percent below 1990 levels by 2050 (EOs B-30-15 and S-3-05).

CARB's 2017 Scoping Plan recommends that local agencies establish community-wide GHG reduction goals for local climate action GHG reduction plans that will help the State achieve its 2030 emissions reduction target and longer-term 2050 emissions reduction goal. Based on this guidance, equivalent targets were calculated for the CAP based on the "California Greenhouse Gas 2000-2018 Emissions Trends and Indicators Report" (CARB 2020). To establish a 2030 GHG reduction target for the CAP, statewide emissions levels from 1990 and 2018 were used to extrapolate a communitywide emissions estimate for 1990. Statewide annual emissions were 4.7 percent lower in 2018 than in 1990. The City's 2018 communitywide emissions were therefore also assumed to be 4.7 percent below 1990 levels. These data were used to calculate the additional percentage reduction in communitywide GHG emissions that would be needed by 2030 to achieve a 40 percent reduction in communitywide emissions below 1990 levels by 2030 (the statewide target of SB 32). Using the trendline in annual GHG reductions that would be needed between 2030 to 2050 to achieve the 2050 reduction target, an interim 2040 GHG reduction target was calculated to align with the 2040 horizon year of the General Plan. The interim target identifies the level of annual reductions that would be needed by 2040, compared to 2018, to keep pace with achieving the 2050 target.

When developing the CAP's GHG reduction targets, the analysis includes adjustments to the State's 2018 GHG emissions inventory and statewide targets to exclude GHG emissions sectors that are regulated at the State-level and sectors not in the city. Because of the lack of jurisdiction, local agencies are not responsible for helping to reduce emissions from these sectors. Specifically, the target-setting analysis for the city excludes emissions from two sectors:

- Communitywide activities covered under the Cap-and-Trade program(regulated by the State)
- Agricultural activities (negligible portion of existing communitywide GHG emissions)⁵

As a result of these adjustments and consistent with State targets and goals relative to 2018 levels, the CAP's targets are expressed according to the percentage reductions in GHG emissions from the City's 2018 community-wide GHG emissions levels, as shown in Table 5.8-4, *General Target Reduction from 2018 Baseline Emissions Levels, 2030 and 2040*.

Table 5.8-4General Target Reduction from 2018 Baseline Emissions Levels, 2030 and
2040

	2030	2040
Target Percentage Below 2018 Baseline GHG Emission Levels	31%	47%
GHG Emissions Target (MTCO ₂ e)	980,934	722,985
GHG Reductions Needed from Forecast GHG Emissions to Meet Targets (MTCO $_2$ e)	166,503	339,478

Source: Data and calculations, Ascent Environmental 2021.

Note: MTCO₂e = metric tons of carbon dioxide equivalents, consisting of carbon dioxide, methane, and nitrous oxides.

5.8.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

⁵ Though the City's existing (2018) communitywide GHG emissions inventory does include an agricultural sector to reflect the historical presence of agricultural activities in the city, the inventory results demonstrate that the amount of residual agricultural activities that directly result in GHG emissions (e.g., fertilizer application for crop cultivation, use of off-road agricultural equipment, and emissions from livestock) on farms or ranches in the city are negligible. With annual 2018 GHG emissions of approximately 300 MTCO₂e, the agricultural sector accounts for approximately 0.02% of total communitywide emissions. The sector is not expected to grow through the General Plan 2040 horizon year.

5.8.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are policies of the Rancho Cucamonga General Plan Update that are relevant to the reduction of greenhouse gas emissions.

Land Use and Community Character Element

- **GOAL LC-1 CITY OF PLACES.** A beautiful city with a diversity and balance of unique and well-connected places.
- LC-1.1 Complete Places. Ensure that a broad range of recreational, commercial, education, and civic amenities are nearby and easily accessible to residents and workers in each neighborhood and each employment district.
- LC-1.3 Quality of Public Space. Require that new development incorporate the adjacent street and open space network into their design to soften the transition between private and public realm and creating a greener more human-scale experience.
- LC-1.4 Connectivity and Mobility. Work to complete a network of pedestrian- and bike-friendly streets and trails, designed in concert with adjacent land uses, using the public realm to provide more access options.
- LC-1.9 Infill Development. Enable and encourage infill development with vacant and underutilized properties through flexible design requirements and potential incentives.
- **LC-1.12** Adaptive Reuse. Support the adaptive reuse of historic properties consistent with neighborhood character.
- LC-1.13 Improved Public Realm. Require that new development extend the "walkable public realm" into previously vacant and/or parking lot-dominant large single-use parcels of land.
- **GOAL LC-2 HUMAN SCALED.** A city planned and designed for people fostering social and economic interaction, an active and vital public realm, and high levels of public safety and comfort.
- LC-2.3 Streetscape. Enhance the pedestrian experience through streetscape improvements such as enhanced street lighting, street trees, and easement dedications to increase the widths of the sidewalks, provide side access parking lanes, and other pedestrian and access amenities.
- LC-2.4 Tree Planting. Require the planting of trees that shade the sidewalks, buffer pedestrians from traffic, define the public spaces of streets, and moderate high temperatures and wind speeds throughout the City.

- LC-2.11 Park-Once. Allow and encourage strategies that enable adjacent uses and properties to flexibly share parking facilities, so that users can park once and pursue multiple activities on foot before returning to their car, such as:
 - Unbundling parking from development
 - Considering parking "districts" demonstrating sufficient parking within a convenient walking distance.
- **GOAL LC-4 COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- LC-4.2 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining vacant parcels.
- LC-4.3 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well-structured such that the physical layout, and land use mix promote walking to services, biking and transit use, and have the following characteristics:
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.
 - Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile.
 - Require development patterns such that 60 percent of dwelling units are within one-half mile walking distance to neighborhood goods and services, such as markets, cafes, restaurants, churches, dry cleaners, laundromats, farmers markets, banks, hair care, pharmacies, and similar uses.
 - Access to goods and services within a safe, comfortable walking distance.
 - Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context.
 - Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.8 Solar Orientation. Street, block, and lot layouts should orient a majority of lots within 20 degrees of a north-south orientation for increased energy conservation.

- LC-4.11 Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building and housing types, and lack of walking or biking access to parks, schools, goods, and services.
- **GOAL LC-5 CONNECTED CORRIDORS.** A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.
- LC-5.1 Improved Street Network. Systematically extend and complete a network of complete streets to ensure a high-level of multi-modal connectivity within and between adjacent Neighborhoods, Centers and Districts. Plan and implement targeted improvements to the quality and number of pedestrian and bicycle routes within the street and trail network, prioritizing connections to schools, parks, and neighborhood activity centers.
- LC-5.2 Connections Between Development Projects. Require the continuation and connectivity of the street network between adjacent development projects and discourage the use of cul-de-sacs or other dead-end routes.
- LC-5.3 Green Public Realm. Ensure that a significant tree canopy and landscaping is provided along corridors, and linkages between land uses, to provide shade and wind protection for pedestrians and bicyclists, and to define these corridors as the "outdoor living rooms" of the City.
- LC-5.4 Multifamily Development. Focus new multifamily housing development along corridors between commercial nodes and centers and ensure that it is well-connected to adjoining neighborhoods and centers by high quality walking and biking routes.
- LC-5.6 Foothill Boulevard as a Connector. Transition Foothill Boulevard from a "divider" to a "connector" that brings the north and south sides together. Ensure that new development along the Foothill Corridor generates a highquality pedestrian- and transit-oriented environment and a concentration of commercial and civic amenities and community gathering places for residents from all parts of the City.
- **GOAL LC-6 ACTIVE CENTERS.** A rich variety of commercial and mixed-use centers throughout the city, which bring a range of opportunities for shopping, dining, recreations, commerce, employment, arts and culture within easy reach of all neighborhoods.
- LC-6.1 Diverse Centers. Encourage the development of neighborhood-serving, community-serving and city-wide serving centers that address the full range community needs and market sectors.

- LC-6.3 Evolving Centers. Encourage the improvement of existing commercial centers to provide more active, human scale environments and community gathering places, including the potential for infill housing and office use.
- LC-6.4 Access to Transit. Encourage the development of commercial and mixeduse centers that are located and organized in relation to existing or planned transit stops, especially along Foothill Boulevard and Haven Avenue.
- LC-6.5 Walkable Environments. Centers should include very walkable and pedestrian-friendly streets with active building frontages along primary corridors and internal streets. In some cases, side access lanes may be inserted between existing major streets and building frontages, providing a low-speed environment that is very safe and comfortable for pedestrians and bicyclists, with pedestrian-oriented building frontages.
- **GOAL LC-7 ROBUST DISTRICTS.** A series of unique, employment-oriented environments for a range of business activities, shopping and entertainment, and community events and gathering.
- LC-7.2 Unify and Connect Development. Require that new development in the 21st Century Employment District land use designation unify and connect development along the Haven Avenue Corridor.
- LC-7.5 Adaptive Industrial Reuse. Encourage adaptive reuse with residential and live/work units, and local serving commercial, in existing industrial structures, particularly in the Central South Community Planning Area.

Open Space Element

- **GOAL OS-2 TRAILS.** A complete, connected network of diverse trails and connected open space that improve access to all areas of the city and encourages non-motorized activities.
- **OS-2.1 Trail Corridors.** Extend, improve and complete the multi-purpose trail network, wherever possible, by utilizing existing flood control channel and utility corridor rights-of-way as public trail corridors.
- **OS-2.2 Connectivity.** Connect trails in Rancho Cucamonga to trails in the San Bernardino National Forest and other hillside open space areas.
- **OS-2.3 Trailheads.** Provide trailhead amenities such as parking, restrooms, information boards, and maps.
- **OS-2.4 Equestrian Trails.** Continue to maintain and pursue the development of planned trails and facilities for equestrian use.

- **OS-2.6 Design for Heat.** Consider extreme heat in the design of streets, parks, trails, and playgrounds to support activity throughout the year and in all weather conditions by including shade trees, shade structures, water fountains, splash pads, lighting for night play in most spaces.
- **OS-2.7 Access.** Require new development to provide access to existing or future trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities).

Mobility and Access Element

- **GOAL MA-1 REGIONAL MOBILITY HUB.** A multimodal transportation hub that connects regional and local destinations.
- MA-1.2 Rancho Cucamonga Station Redevelopment. Support redevelopment in and around the Rancho Cucamonga Station to support transit-oriented development.
- **MA-1.4 Local Mobility Hub.** Require new development at mobility hubs and key stops along the future bus rapid transit and future circulatory system to facilitate first mile/last mile connectivity to neighborhoods.
- MA-1.5Provide Mobility Options. Provide roadway connections and local mobility
hubs designed to capture 80% of the population and employment south of
Base Line Road.
- MA-1.6 Transit Boulevard Implementation. Require high-quality transit streets to not only account for how transit is impacted by the geometry of the corridor, but also by signal timing, signal phasing, turns, and other operations that may jeopardize the quality of service.
- **GOAL MA-2 ACCESS FOR ALL.** A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all users.
- MA-2.1 Complete Streets. Require that new roadways include provisions for complete streets, balancing the needs of all users of all ages and capabilities.
- MA-2.3 Street Connectivity. Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.
- MA-2.4 Street Vacations. Prioritize pedestrian and utility connectivity over street vacations.
- MA-2.5 Context. Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.
- MA-2-6 Roadway Scale. Balance roadway size and design configuration to ensure that vehicular speeds, volumes and turning movements do not compromise the safety and comfort of pedestrians and bicyclists.

- MA-2.9 Block Pattern. Require development projects to arrange streets in an interconnected block pattern, so that pedestrians, bicyclists, and drivers are not forced onto arterial streets for inter- or intra- neighborhood travel (see Placemaking toolkit in Vol. 4 for more information).
- MA-2.10 Master Planning. Master plan sites so as to ensure a well-structured network and block pattern with sufficient access and connectivity; especially in all focus areas, including the Cucamonga Town Center, Etiwanda Heights Town Center, and the Southeast Industrial Area.
- MA-2.11 Transportation Demand Management. Require new projects to implement Transportation Demand Management strategies, such as employer provided transit pass/parking credit, low-speed communications infrastructure for telecommuting, carpooling incentive, etc.
- MA-2.12 Healthy Mobility. Provide pedestrian facilities and class II buffered bike lanes (or separated bikeways) on auto-priority streets where feasible to promote active transportation.
- **GOAL MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.
- MA-3.2 Traffic Safety. Prioritize transportation system improvements that help eliminate traffic-related fatalities and severe injury collisions.
- MA-3.3 Vulnerable User Safety. Prioritize pedestrian improvements in the Pedestrian Priority Area shown on Figure 8 to promote safety in the southwest area of the City.
- **GOAL MA-5 SUSTAINABLE TRANSPORTATION.** A transportation network that adapts to changing mobility needs.
- MA-5.1 Land Use Supporting Reduced VMT. Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.
- **MA-5.3 Funding.** Remain flexible in the pursuit and adoption of transportation funding mechanisms that fund innovative transportation solutions.
- MA-5.4 Intelligent Systems Preparation. Upgrade the City's ATMS and communications systems to ensure that the City meets the intelligent transportation system demands of today while planning for future demands associated with AVs and CVs.

Housing Element

- **GOAL H-1 HOUSING OPPORTUNITIES.** A diverse community with a broad range of housing types and opportunities to accommodate expected new households.
- H-1.3 Accessory Dwelling Units. Facilitate the development of accessory dwelling units to provide additional housing opportunities pursuant to State law and established zoning regulations.
- **GOAL H-4 HOUSING QUALITY.** A community with quality, healthy housing.
- **H-4.2 Substandard Housing.** Encourage the revitalization and rehabilitation of substandard residential structures.
- **H-4.3 Residential Rehabilitation.** Focus rehabilitation to neighborhoods with deteriorating units.
- **COAL H-6 EQUAL HOUSING OPPORTUNITIES.** An equitable community that provides equal housing opportunities for all residents.
- **H-6.2 Land Use Plan.** Facilitate development projects that will improve a neighborhood's access to resources and opportunities.

Public Facilities and Services Element

- **GOAL PF-1 STATE-OF-THE-ART FACILITIES.** Residents enjoy state-of-the-art public and community facilities that support existing programs, accommodate future needs, and are accessible to all members of the community.
- **PF-1.1 New Building Standards.** Continue to implement high-quality standards for new public facilities and improvements to existing buildings.
- **GOAL PF-5 WATER-RELATED INFRASTRUCTURE.** Water and wastewater infrastructure facilities are available to support future growth needs and existing development.
- **PF-5.1 Recycled Water.** Work with the CVWD to expand the recycled water program to include existing private development.
- **GOAL PF-6 SOLID WASTE.** The volume of solid waste that enters regional landfills is minimized and the amount of recycling increased.
- **PF-6.1Recycling.** Encourage Recycling and Organics collection and processing in
all sectors of the community to divert items from entering landfills.
- **PF-6.2 Refuse Facilities.** Consult with public agencies and private contractors to ensure adequate organics processing facilities are available.

Resource Conservation Element

- **GOAL RC-2** WATER RESOURCES. Reliable, readily available, and sustainable water supplies for the community and natural environment.
- **RC-2.1 Water Supplies.** Protect lands critical to replenishment of groundwater supplies and local surface waters (Figure RC-3).
- **RC-2.2 Groundwater Recharge**. Preserve and enhance the existing system of stormwater capture for groundwater recharge.
- **RC-2.5** Water Conservation. Require the use of cost-effective methods to conserve water in new developments and promote appropriate water conservation and efficiency measures for existing businesses and residences.
- **RC-2.6** Irrigation. Encourage the conversion of water-intensive turf/landscape areas to landscaping that uses climate- and wildfire-appropriate native or non-invasive plants, efficient irrigation systems, greywater, and water efficient site maintenance.
- **RC-2.7 Greywater**. Allow and encourage the use of greywater to meet or offset onsite non-potable water demand.
- **GOAL RC-5 LOCAL AIR QUALITY.** Healthy air quality for all residents.
- **RC-5.1 Pollutant Sources**. Minimize increases of new air pollutant emissions in the city and encourage the use of advance control technologies and clean manufacturing techniques.
- **RC-5.2** Air Quality Land Use Compatibility. Avoid siting of homes, schools, hospitals, and childcare facilities and land uses within 500 feet of land uses that are considered large emitters.
- **RC-5.3 Barriers and Buffers**. Require design features such as site and building orientation, trees or other landscaped barriers, artificial barriers, ventilation and filtration, construction, and operational practices to reduce air quality impacts during construction and operation of large stationary and mobile sources.
- **RC-5.4 Health Risk Assessment**. Consider the health impacts of development of sensitive receptors within 500 feet of a freeway, rail line, arterial, collector or transit corridor sources using health risk assessments to understand potential impacts.
- **RC-5.5 Community Benefit Plan**. Require that any land use generating or accommodating more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week, provide a community benefit plan demonstrating an offset to community impacts of the truck traffic.

- RC-5.6 New Sensitive Receptors Near Existing Industrial Uses. Avoid placing homes, schools, hospitals, and childcare facilities within 1,000 feet of a land use that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week.
- **RC-5.7** New Localized Air Pollution Sources Near Existing Sensitive Receptors. Avoid placing land uses that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week within 1,000 feet of homes, schools, hospitals, and childcare facilities.
- **RC-5.8 Truck Hook-Ups at New Industrial or Commercial Developments**. Require new industrial or commercial developments at which heavy-duty diesel trucks idle on-site to install electric truck hook-ups in docks, bays, and parking areas.
- **RC-5.9 Clean and Green Industry**. Prioritize non-polluting industries and companies using zero or low air pollution technologies.
- **RC-5.10 Dust and Odor**. Require new construction to include measures to minimize dust and odor during construction and operation. reduce dust and odor.
- **GOAL RC-6 CLIMATE CHANGE.** A resilient community that reduces its contributions to a changing climate and is prepared for the health and safety risks of climate change.
- **RC-6.1 Climate Action Plan.** Maintain and implement a Climate Action Plan (CAP) that provides best management practices for reducing greenhouse gas emissions.
- **RC-6.2 Renewable Energy.** Encourage renewable energy installations and facilitate green technology and business.
- **RC-6.3 Reduce Energy Consumption.** Encourage a reduction in community-wide energy consumption.
- **RC-6.4 Urban Forest.** Protect the city's healthy trees and plant new ones to provide shade, carbon sequestration, and purify the air.
- RC-6.5GHG Reduction Goal. Reduce emissions to 80 percent below 1990 levels by
2050 and achieve carbon neutrality by 2045.
- **RC-6.6 Co-Benefits**. Prioritize the development and implementation of GHG reduction measures that also achieve economic, health, social, environmental, and other co-benefits for the City and its residents and businesses.

- **RC-6.7** Structural Equity. Encourage GHG reduction and climate adaptation measures such as trail completion, equipment upgrade, sidewalk connectivity, tree planting, and buffers be included in the City's Capital Improvement Program (CIP) to improve areas of the City where these features are lacking.
- **RC-6.8 Reduce Vehicle Trips**. Require Transportation Demand Management strategies such as employer provided transit pass/parking credit, bicycle parking, bike lockers, high-speed communications infrastructure for telecommuting, carpooling incentive, etc. for large office, commercial, and industrial uses.
- **RC-6.9** Access. Require pedestrian, vehicle, and transit connectivity of streets, trails, and sidewalks, as well as between complementary adjacent land uses.
- **RC-6.10 Green Building.** Encourage the construction of buildings that are certified LEED or equivalent, emphasizing technologies that reduce GHG emissions.
- **RC-6.11 Climate-Appropriate Building Types**. Encourage alternative building types that are more sensitive to and designed for passive heating and cooling within the arid environment found in Rancho Cucamonga.
- **RC-6.12 Reduced Water Supplies**. When reviewing development proposals, consider the possibility of constrained future water supplies and require enhanced water conservation measures.
- **RC-6.13 Designing for Warming Temperatures.** When reviewing development proposals, encourage applicants and designers to consider warming temperatures in the design of cooling systems.
- **RC-6.14 Designing for Changing Precipitation Patterns**. When reviewing development proposals, encourage applicants to consider stormwater control strategies and systems for sensitivity to changes in precipitation regimes and consider adjusting those strategies to accommodate future precipitation regimes.
- **RC-6.15 Heat Island Reductions**. Require heat island reduction strategies in new developments such as light-colored paving, permeable paving, right-sized parking requirements, vegetative cover and planting, substantial tree canopy coverage, and south and west side tree planting.
- **RC-6.16 Public Realm Shading**. Strive to improve shading in public spaces, such as bus stops, sidewalks and public parks and plazas, through the use of trees, shelters, awnings, gazebos, fabric shading and other creative cooling strategies.
- **RC-6.17 Offsite GHG Mitigation**. Allow the use of creative mitigation efforts such as offsite mitigation and in lieu fee programs as mechanisms for reducing project-specific GHG emissions.

- **RC-6.18** Water Sources with Low GHG Emissions. Encourage local and regional water utilities to obtain water from sources with low or no GHG emissions.
- **GOAL RC-7 ENERGY.** An energy efficient community that relies primarily on renewable and non-polluting energy sources.
- **RC-7.1** Electric Vehicle (EV) Charging on City Property. As funding is available, encourage the installation of publicly available electric vehicle charging stations at City-owned buildings, facilities, property, and in the public rightof-way.
- **RC-7.2 New EV Charging.** Require new multifamily residential, commercial, office, and industrial development to include charging stations, or include the wiring for them.
- **RC-7.3 EV Charging Retrofits.** Encourage existing development to retrofit to include charging stations.
- **RC-7.4** New Off-Road Equipment. When feasible, require that off-road equipment such as forklifts and yard tugs necessary for the operations of all new commercial and industrial developments be electric or fueled using clean fuel sources.
- **RC-7.5 Municipal Vehicle Fleet.** Reduce fossil fuel consumption of the City's vehicle fleet by increasing the number of electric or zero emissions vehicles.
- **RC-7.6 Efficiency Retrofits.** Encourage existing private property owners to implement energy efficiency retrofits during substantial improvement as defined by the California Building Code.
- **RC-7.7 Sustainable Design.** Encourage sustainable building and site design that meets the standards of Leadership in Energy and Environmental Design (LEED), Sustainable Sites, Living Building Challenge, or similar certification.
- **RC-7.8** Farmers Market, Fork to Table. Support microscale agriculture and farmers markets, and similar methods of encouraging locally grown and consumed produce.
- **RC-7.9 Passive Solar Design.** Require new buildings to incorporate energy efficient building and site design strategies for the arid environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.
- **RC-7.10** Alternative Energy. Continue to promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.

- **RC-7.11 Community Development Subdivisions.** When reviewing applications for new subdivisions, require residences be oriented along an east-west access, minimizing western sun exposure, to maximize energy efficiency.
- **RC-7.12** Solar Access. Prohibit new development and renovations that impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.
- **RC-7.13 Energy-Efficient Infrastructure.** Whenever possible, use energy-efficient models and technology when replacing or providing new city infrastructure such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.

The Rancho Cucamonga Climate Action Plan

The CAP proposes goals, strategies, and measures to reduce communitywide and municipal GHG emission reductions in the categories of zero emission and clean fuels, efficient and carbon-free buildings, renewable energy and zero carbon electricity, carbon sequestration, local food supply, efficient water use, waste reductions, and sustainable transportation. Each measure is described in detail in the CAP, including the full description, key performance metrics, and estimated potential GHG emissions reductions.

- Goal 1: Zero Emissions and Clean Fuels. A community that uses zero emission vehicles and clean vehicles to move people and goods.
- **Goal 2: Efficient and Carbon Free Buildings**. An existing building stock that is energy efficient and net zero carbon.
- **Goal 3: Green Building.** Development practices that demonstrate high environmental performance through decarbonization, sustainable design, and zero net carbon buildings.
- Goal 4: Sustainable City-Facilities. City facilities that achieve high levels of sustainable design.
- **Goal 5: Zero Emission Electricity.** A city powered by carbon free electricity.
- **Goal 6: Thriving Urban Forests.** A community with significant urban forestry resources.
- **Goal 7: Local Food.** A community with locally grown and affordable food.
- **Goal 8: Water Conservation.** A community that conserves and recycles water.
- **Goal 9: Efficient Wastewater Management.** A city that generates minimal wastewater through sustainable treatment and reuse.
- **Goal 10: Zero-Waste.** A community that produces minimal solid waste.
- **Goal 11: Regional Mobility Hub.** A multimodal transportation hub that connects regional and local destinations through a symbiotic relationship with regional partners.

- **Goal 12: Active Transportation.** A first-class pedestrian and bicycle network that fosters safe and connected access to non-motorized travel and recreation.
- **Goal 13: Sustainable Transportation.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.

5.8.4 ENVIRONMENTAL IMPACTS

5.8.4.1 Methodology

This analysis consists of a qualitative and quantitative assessment of the GHG emissions generated by the General Plan Update. This approach is in accordance with CEQA Guidelines Section 15064.4(a), which affirms the discretion of a lead agency to determine, in the context of a particular project, whether to use quantitative and/or qualitative methodologies to determine the significance of a project's impacts.

The City has prepared a CAP as a companion document to the General Plan Update and part of the General Plan Update process. The CAP is intended to carry out the General Plan Update's climate change goals and policies to reduce GHG emissions. As part of the CAP, the City prepared an inventory of existing communitywide GHG emissions from activities in the city in 2018 and forecasts of future GHG emissions under implementation of the General Plan Update. The forecasts were developed to reflect 2040 population, housing-unit, and employment growth assumptions under implementation of the General Plan Update. The CAP has been prepared as a qualified "plan for the reduction of greenhouse gases" that would allow the cumulative impact analyses of GHG emissions for future projects in the city to tier from the GHG analysis in the General Plan Update EIR, in accordance with CEQA Guidelines Section 15183.5. A "qualified" CAP should include the following elements (CEQA Guidelines Section 15183.5[b][1]):

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendments if the plan does not achieve specified levels.
- Be adopted in a public process following environmental review.

The modeling and analysis in the following sections were used to prepare the CAP and are relevant to the methodology used for analyzing the GHG emissions impacts of the General Plan Update.

5.8.4.2 Impacts

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.8-1: The proposed project would not directly or indirectly result in an increase in GHG emissions compared to existing conditions. [Threshold GHG-1]

Implementation of the General Plan Update would result in growth in population and the development of new residential and nonresidential projects in the city. Development under the proposed General Plan Update would result in GHG emissions that would contribute to climate change on a cumulative basis. Detailed construction information for individual projects is unknown at this time, but would typically involve use of heavy-duty equipment, construction worker commute trips, material deliveries, and vendor trips. These activities would result in GHG emissions that are limited in duration for any given project, but when taken together over buildout of the General Plan Update, could be considerable. Long-term operational sources of GHG emissions associated with the proposed General Plan Update would include mobile sources (e.g., vehicle exhaust), energy consumption (e.g., electricity and natural gas), solid waste (e.g., emissions that would occur at a landfill associated with solid waste decomposition), wastewater treatment, and water consumption (e.g., electricity used to deliver and treat water consumed by customers in the city).

Emissions Forecasts

Communitywide GHG emissions were forecast for years 2030 and 2040 based on the growth and development assumptions of the General Plan Update, which are included in the CAP. GHG emissions for the on-road sector were forecast using vehicle miles traveled (VMT) modeling results developed by Fehr and Peers as part of the General Plan Update update process. The VMT forecast was developed using recommended methods from the SB 375 (2008) Regional Targets Advisory Committee and the U.S. Community Protocol for Accounting and Reporting of GHG Emissions. It was converted to GHG emissions using factors from the CARB 2017 Emissions Factor model (v. 1.0.2). The CAP includes both a business-as-usual (BAU) forecast and adjusted business-as-usual (ABAU) forecast. Both forecast scenarios reflect levels of future growth and development under the General Plan Update.

The BAU forecast provides communitywide emissions for the years 2030 and 2040 but does not account for any State or federal legislative actions that would reduce emissions from activities in the city. The BAU forecast results are shown in Table 5.8-5, *Business-As-Usual Forecast GHG Emissions for the City of Rancho Cucamonga*.

Contor	Forecast Emissions (MTCO ₂ e)		
Sector	2030	2040	
On-Road Transportation	813,424	873,287	
Building Energy	728,552	808,735	
Solid Waste	33,806	38,118	
Water	21,956	24,716	
Off-Road Equipment	14,647	16,515	
Wastewater	2,898	3,267	
Agriculture	300	300	
Total	1,615,583	1,764,938	

Table 5.8-5 Business-As-Usual Forecast GHG Emissions for the City of Rancho Cucamonga

Source: Ascent Environmental 2021.

Note: MTCO₂e = metric tons of carbon dioxide equivalents

The adjusted business-as-usual forecast accounts for the effects of existing State and federal law and regulations on future community-wide emissions in the city. The legislation and regulations accounted for in the ABAU forecast are shown in Table 5.8-6, Federal and State Regulations Used in the ABAU Forecast of Future Communitywide GHG Emissions for 2030 and 2040. The ABAU forecast results are shown in Table 5.8-7, Adjusted Business-As-Usual Forecast GHG Emissions for the City of Rancho Cucamonga.

Table 5.8-6Federal and State Regulations Used in the ABAU Forecast of Future
Communitywide GHG Emissions for 2030 and 2040

Government Level	Legislation Title	Legislation Description
Federal	Federal Clean Air Act (CAA)	In 2007, the U.S. Supreme Court ruled that CO_2 is an air pollutant as defined under the CAA, and the U.S. Environmental Protection Agency has the authority to regulate emissions of GHG.
Federal ¹	Corporate Average Fuel Economy (CAFE) Standards	The federal CAFE Standards determine the fuel efficiency of certain vehicle classes in the U.S.
State	Executive Order S-01-07	Executive Order S-01-07 set forth a low carbon fuel standard for California, whereby the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.
State	AB 1493	AB 1493 (Pavley) required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks.
State	AB 197	AB 197 creates a legislative committee to oversee CARB and requires CARB to take specific actions when adopting plans and regulations pursuant to SB 32 related to disadvantaged communities, identification of specific information regarding reduction measures, and information regarding existing GHGs at the local level.

Government Level	Legislation Title	Legislation Description	
State	SB 350	SB 350 requires the State to set GHG emission reduction targets for the load serving entities through Integrated Resource Planning. SB 350 requires an increase in the Renewable Portfolio Standard to 50 percent by 2030 and doubling energy savings in electricity and natural gas end uses.	
State	RPS	Requires California energy utilities to procure 33 percent of electricity from renewable sources by 2020.	
State	SB 100	Requires California energy utilities to procure 60 percent of electricity from renewable sources by 2030 and 100 percent from renewable and zero-carbon sources by 2045.	
State	California Building Efficiency Standards (Title 24, Part 6)	Requires all new buildings in California to comply with energy efficiency standards established by CEC.	
State	AB 341	California target to achieve a 75 percent solid waste diversion target by 2020.	
State	Pavley Clean Car Standards	Establishes GHG emission reduction standards for model years 2009 through 2016 that are more stringent than federal CAFE standards.	
State ¹	Advanced Clean Car Standards	Establishes GHG emission reduction standards for model years 2017 through 2025 that are more stringent than federal CAFE standards.	
State	SBX7-7	Requires a 20 percent reduction in per capita water usage by 2020.	
Federal	Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles	Establishes fuel efficiency standards for medium- and heavy-duty engines and vehicles.	

Source: Ascent Environmental 2021.

Notes:

¹ On August 2, 2018, the National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA) proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). This rule addresses emissions and fuel economy standards for motor vehicles and is separated in two parts as described below.

Part One "One National Program" (84 FR 51310) revokes a waiver granted by EPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of greenhouse gas emission (GHG) reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction. This revocation became effective on November 26, 2019, restricting the ability of CARB to enforce more stringent GHG emission standards for new vehicles and set zero emission vehicle mandates in California. CARB has estimated the vehicle tailpipe and evaporative emissions impacts to criteria air pollutants from SAFE Rule Part One and has provided offmodel adjustment factors to adjust emissions output from CARB's Emission Factor model.

Part Two would address Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2020. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026, but comment is sought on a range of alternatives discussed throughout the proposed rule. This proposal addressing CAFE standards is being jointly developed with EPA, which is simultaneously proposing tailpipe carbon dioxide standards for the same vehicles covered by the same model years. As of January 31, 2020, Part Two is not final. The timing of a final SAFE Rule Part Two and the outcome of any pending or potential lawsuits (and how such lawsuits could delay or affect its implementation) are unknown at this time.

	Forecast Emissions ¹ (MTCO ₂ e)		
Sector	2030	2040	
On-Road Transportation	562,416	559,169	
Building Energy	522,132	437,801	
Solid Waste	33,806	38,118	
Off-Road Equipment	14,647	16,515	
/ater	12,916	7,948	
Vastewater	2,581	2,612	
griculture	300	300	
otal	1,148,798	1,062,462	

Table 5.8-7	Adjusted Business-As-Usual Forecast GHG Emissions for the City of Rancho
	Cucamonga

Source: Ascent Environmental 2021.

Note: MTCO₂e = metric tons of carbon dioxide equivalent.

¹Includes legislative reductions from State and federal programs.

As shown in Table 5.8-5, future GHG emissions for the years 2030 and 2040 would continue to increase under a BAU scenario in which no State or federal legislative actions would be taken that would reduce emissions from future activities and growth under implementation of the General Plan Update. However, as discussed in the Methodology section, State and federal legislative actions (addressed in the ABAU scenario) would result in future reductions in communitywide GHG emissions from specific activities in the city and would, therefore, reduce overall GHG emissions from these activities even as the city continues to grow and development occurs through implementation of the General Plan Update. As shown in Table 5.8-7, by 2030, activities in the city are anticipated to generate approximately 1,148,798 MTCO₂e annually under this ABAU scenario, which would be a reduction of 277,959 MTCO₂e (19 percent) from the city's 2018 baseline annual emissions of 1,426,757 MTCO₂e. By 2040, annual emissions under the ABAU scenario would be 1,062,462 MTCO₂e, which would be a reduction of 364,295 MTCO₂e (26 percent) from to the City's 2018 baseline communitywide emissions.

In addition to the State and federal actions that would reduce emissions from future activities in the city, the General Plan Update includes goals and policies that would further support reductions in emissions from existing and future activities in the city (see Section 5.8.3). In addition to the General Plan Update policies that will support GHG reductions, the CAP, as a companion document to the General Plan Update, includes a set of goals, strategies, and measures with specific metrics and quantified GHG reduction estimates that will further support GHG reductions from existing and future development in the city. Specifically, the following CAP strategies are focused on reducing GHG emissions associated with new development and will help reduce emissions below the city's 2018 baseline alongside the legislative actions discussed in the Methodology section and included in Table 5.8-6.

- Strategy 1.2: EV Charging at New Development. New construction and major alternatives are to provide "EV capable" and "EV install" parking spaces according to land use type.
- Strategy 1.4: New Off-Road Equipment. Adopt an ordinance or update development code requiring off-road equipment associated with the operation of new commercial and industrial development to be electric or fueled using low carbon alternative fuels such as renewable diesel.
- Strategy 1.6: Construction Vehicle Fleets. Adopt an ordinance or update development code that requires 75 percent of heavy-duty vehicles in construction fleets operating in the city to be electric or zero emissions vehicles by 2030, and 100 percent electric or zero emissions by 2040.
- Strategy 3.1: Zero Net Energy for New Residential Buildings. Adopt an ordinance or update development code requiring that new single- and multifamily residential units include zero net energy (i.e., on-site generation of energy is equal to on-site energy consumption).
- Strategy 3.2: Zero Net Energy for New Nonresidential Buildings. Adopt an ordinance or update development code requiring new nonresidential development to install PV solar panels and be zero net energy.
- Strategy 3.3: Solar at New Warehouses. Adopt an ordinance or update development code requiring new development of industrial and warehouse uses to install PV solar panels that generate electricity equal to anticipated building consumption.
- Strategy 5.1: RCMU Renewable Electricity Supply. Procure carbon free sources for 75 percent of electricity supplied by RCMU by 2030.
- Strategy 5.2: Electricity Supply Choice. Join an existing CCA or develop a Cityadministered CCA program and provide energy purchasing options for residents and businesses in the city that are generated from renewable resources. The CCA should provide two purchasing plan options for customers:
 - A basic plan would include electricity that is generated from renewable resources consistent or above the levels required by the Renewable Portfolio Standard
 - A 100 percent renewable electricity option should be provided which offers electricity generated from 100 percent renewable resources
- Strategy 12.1: Transportation Demand Management. Adopt an ordinance or update development code requiring new development to implement TDM strategies that reduce VMT by 5 percent in new development by 2030 and 10 percent by 2030 or later.

As new development projects are constructed in the city, the above set of CAP strategies will help reduce new GHG emissions associated with the projects and, therefore, help reduce overall GHG emissions as the city continues to grow. Reductions in emissions from these strategies will be achieved through increasing the energy efficiency of new residential and nonresidential development as well as increasing the amount of renewable energy used in all new development in the city through on-site and community-wide renewable energy strategies. CAP strategies will also reduce emissions from transportation-related activity by reducing demand for single-occupancy vehicle trips and supporting the transition to low-emissions or zero-emissions vehicle technologies.

The emissions reductions needed to achieve the CAP targets for 2030 and 2040 cannot be achieved entirely through reducing emissions from new development. The CAP also includes a set of strategies specifically designed to reduce emissions from existing development and activities in the city. The following CAP strategies will help reduce emissions below the City's 2018 baseline alongside the CAP strategies focused on new development.

- Strategy 1.1: EV Charging at Existing Developments. Use EV Readiness Plan to determine the most appropriate and efficient location to install Level II EV chargers at public facilities and non-residential uses. In addition, the City will develop an outreach and education program to inform residents and business owners about available incentives to encourage the installation of Level II EV charging stations at existing private residential development and commercial and retail development.
- Strategy 1.3: Zero Emission and Clean Equipment. Develop an incentive program to support the replacement of heavy-duty equipment operating at existing industrial and commercial facilities with zero emissions vehicles.
- Strategy 1.5: Municipal Vehicle Fleet. Transition 50 percent of the City's light and mediumduty vehicle fleet to electric or zero emissions by 2030 and transition 100 percent of the City's light and medium-duty vehicle fleet, and fire trucks to electric or zero emissions by 2040.
- Strategy 2.2: Solar at Existing Warehouses and Commercial Land Uses. Develop an incentive program to install PV solar panels on existing nonresidential rooftops.
- Strategy 2.3: Renewable Energy Retrofits. Continue to implement the RCMU Renewable Energy Program and work with SCE to provide incentives for existing private development to install on-site PV solar systems.
- Strategy 4.1: Municipal Energy Conservation
 - Reduce energy consumed at existing City-facilities by 15 percent below baseline energy consumption levels by 2030, and 20 percent below baseline energy consumption levels by 2040.
 - Develop a lighting efficiency plan that identifies a schedule for the replacement of halogen light bulbs used in outdoor lighting to be LED.
- Strategy 4.2: Renewable Energy at Municipal Facilities. Install PV solar at City-owned facilities to provide electricity equal to 30 percent of City-facility consumption by 2030, and 50 percent of City-facility consumption by 2040.
- Strategy 5.1: RCMU Renewable Electricity Supply. Procure carbon free sources for 75 percent of electricity supplied by RCMU by 2030.

Strategy 6.1: Tree Planting at Existing Development and Municipal Facilities

- Develop a tree planting program to incentivize planting new trees within the public right-of-way and maintained by private single-family and multi-family residential property owners, and new trees planted on existing private residential property.
- Ensure that the location and species of new trees planted at existing development and municipal facilities is appropriate and consistent with the City's adopted master list of street trees and parking lot trees.
- Strategy 8.1: Water Efficient Landscaping Retrofits. Develop an incentive program to encourage the installation of water efficient landscapes (e.g., drought tolerant plants, artificial turf) to reduce outdoor water consumption at existing private development by 20 percent.

Strategy 10.1: Organics Recycling

- Develop a waste reduction plan that identifies activities the City could implement to work with Burrtec (or another contract waste hauler) to divert 60 percent of organic solid waste generated by existing commercial and residential development by 2030, and 75 percent by 2040.
- Develop a waste reduction plan that identifies food waste actions the City can implement to recycle 60 percent of organic food waste generated at City facilities by 2030, and 75 percent by 2040.
- **Strategy 11.1: Local Mobility Hubs.** Develop a mobility hub plan that increases transit mode share by three (3) percent by 2030, and 10 percent by 2040.
- Strategy 11.2: Pedestrian and Bicycle Network
 - Increase the total City street length with bike lanes to 30 percent by 2030 and 40 percent by 2050 through the development of a bicycle network.
 - Develop a bicycle network throughout the city that provides continuous bicycle infrastructure between key destinations by 2030.
- Strategy 13.1: Emerging Technologies. Complete signal timing improvements along 50 percent of key commute corridors by 2030, and 100 percent of key commute corridors by 2040.

Many of these CAP strategies focus on reducing emissions through energy-efficiency upgrades to existing buildings, improving energy conservation practices, and increasing the renewable energy supplied to existing buildings in the city through on-site energy generation opportunities to increase the supply of renewable energy to residents and businesses citywide. Other CAP strategies focus on reducing emissions from existing transportation activity in the city either through upgrades in vehicle technology to use low- or zero-emissions vehicles or influencing transportation behavior through the development of active transportation and public transit infrastructure. Some CAP strategies also focus on reducing emissions through resource conservation and recycling for water use and organic waste generated in the city. Table 5.8-8, *Summary of GHG Emissions Reductions Achieved by CAP Strategies and*

Measures by 2030 and 2040 (MTCO $_2e$ /Year), provides a summary of all the CAP strategies and the estimate emissions reductions they will achieve through CAP implementation for the years 2030 and 2040.

CAP Measure	2030	2040
Strategy 1.1: EV Charging at Existing Developments	3,928	7,778
Strategy 1.2: EV Charging at New Development	4,040	7,419
Strategy 1.3: Zero Emission and Clean Equipment	590	1,081
Strategy 1.4: New Off-Road Equipment	205	406
Strategy 1.5: Municipal Vehicle Fleet	234	793
Strategy 1.6: Construction Vehicle Fleets	342	522
Strategy 2.1: Energy Efficiency Retrofit Program	36,078	80,642
Strategy 2.2: Solar at Existing Warehouses and Commercial Land Uses	569	669
Strategy 2.3: Renewable Energy Retrofits	5,471	6,854
Strategy 3.1: Zero Net Energy for New Residential Buildings	4,646	3,380
Strategy 3.2: Zero Net Energy for Nonresidential Buildings	8,692	19,043
Strategy 3.3: Solar at New Warehouses	3,086	3,096
Strategy 4.1: Municipal Energy Conservation	718	650
Strategy 4.2: Renewable Energy at Municipal Facilities	722	546
Strategy 5.1: RCMU Renewable Electricity Supply	2,693	N/A
Strategy 5.2: Electricity Supply Choice	99,499	29,343
Strategy 6.1: Tree Planting at Existing Development and Municipal Facilities	14	44
Strategy 8.1: Water Efficient Landscaping Retrofits	57	32
Strategy 10.1: Organics Recycling	6,298	21,541
Strategy 11.1: Local Mobility Hubs	6,880	10,885
Strategy 11.2: Pedestrian and Bicycle Network	670	1,614
Strategy 12.1: Transportation Demand Management	258	939
Strategy 13.1: Emerging Technologies	1,254	2,430
Total CAP Reductions from City Strategies and Measures	186,840	199,709

Table 5.8-8Summary of GHG Emissions Reductions Achieved by CAP Strategies and
Measures by 2030 and 2040 (MTCO2e/Year)

Source: Ascent Environmental 2021.

Notes: MTCO₂e = metric tons of carbon dioxide equivalents.

Table 5.8-9, Summary GHG Emissions Targets and Reduction in the CAP ($MTCO_2e/Year$), shows the city's 2018 baseline emissions as well as the projections for future emissions under the BAU and ABAU scenarios. Table 5.8-9 also includes the reductions achieved through legislative actions as well as the additional reductions achieved the through the General Plan Update and CAP.

Emissions (MTCO ₂ e)	2018	2030	2040
Baseline Emissions	1,426,757	N/A	
BAU Emissions Forecasts	N/A	1,615,583	1,764,938
Federal and State Legislative Reductions	N/A	466,785	702,476
ABAU Emissions Forecast (BAU Forecasts – Federal and State Legislative Reductions)	N/A	1,148,798	1,062,462
Total Reductions from CAP Measures	N/A	186,840	199,709
City Emissions with CAP (ABAU – CAP Reductions)	N/A	961,957	862,752

Table 5.8-9	Summary GHG Emissions Targets and Reduction in the CAP (MTCO ₂ e/Year)
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Source: Ascent Environmental 2021.

Notes: MTCO₂e = metric tons of carbon dioxide equivalents

N/A = not applicable

Implementation of the General Plan Update will result in growth in population and the development of new residential and nonresidential projects and, as a result, generate new activities that result in GHG emissions. As noted in Chapter 3, *Project Description*, the City has prepared the CAP as a companion to the General Plan, with locally set GHG goals and performance metrics for later projects. In addition, as shown in Table 5.8-9, due to set legislative actions that will continue to be implemented in the future to help reduce GHG emissions from activities in the city (e.g., transportation and energy use), overall GHG emissions will decline even with growth and development through implementation of the General Plan Update. As shown in Table 5.8-9, with reductions achieved through legislative actions and implementation of the General Plan Update and CAP, future GHG emissions in the city are projected to be 961,957 MTCO₂e by 2030 and 862,754 MTCO₂e by 2040. As a result, future communitywide GHG emissions with implementation of the General Plan Update would decrease from the city's baseline emissions of 1,426,757 MTCO₂e. Implementation of the General Plan Update would not directly or indirectly result in an increase in GHG emissions compared to existing conditions in 2018. Therefore, this impact would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.8-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.8-1 would be less than significant.

Impact 5.8-2: The proposed project would not conflict with the SCAG region's achievement of SB 375 emissions reduction targets. [Threshold GHG-2]

SB 375 requires that metropolitan planning organizations, including SCAG, develop a Sustainable Communities Strategy that meets the per capita GHG emissions reduction targets set by CARB for the years 2020 (8 percent below 2005 levels) and 2035 (19 percent below 2005 levels). On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal). Connect SoCal includes a comprehensive set of strategies to reduce transportation-related GHG emissions in the SCAG region, which includes San Bernardino County and the City. Connect SoCal's core visions to achieve the established emissions reduction targets include:

- Better management of the existing transportation system through demand management strategies and Intelligent Transportation Systems.
- More efficient movement of goods moving across the transportation system.
- The development of complete streets that are safe and inviting to all roadway users.
- Prioritizing the preservation of the regions existing transportation infrastructure.
- Expanding the region's transit network and fostering development in transit-oriented communities.

The General Plan Update has a comprehensive set of goals and policies—primarily in Chapter 1: Land Use and Community Character and Chapter 4: Mobility and Access—that are consistent with the core visions in Connect SoCal. The following General Plan Update goals and policies are consistent with and would support the SCAG region in achieving its SB 375 emissions reduction targets—Goal LC-2, Policy LC-2.11; Goal LC-4, Policies LC-4.2, LC-4.3, LC-4.5; Goal LC-5, Policy LC-5.1; Goal LC-6, Policies LC-6.1, LC-6.5; Goal MA-1, Policies MA-1.2, MA-1.4, MA-1.5; Goal MA-2, Policies MA-2.1, MA-2.3, MA-2.11; and Goal MA-5, Policies MA-5.1, MA-5.2, and MA-5.4.

These General Plan Update goals and policies are consistent with SCAG's Connect SoCal core visions and would support future development that reduces regional VMT and associated GHG emissions, as described below. Goals and corresponding policies in Chapter 1: Land Use and Community Character would work to promote compact, pedestrian-oriented neighborhoods that support all transportation modes and reduce single-occupancy vehicle trips and subsequent VMT and associated GHG emissions. Goals and policies in Chapter 4: Mobility and Access would promote alternative transportation modes, including walking, biking, and public transit, while supporting innovation in new transportation modes such as shared-mobility options. These policies would also support improvements in regional transit within the city, better connecting the city to regional job centers, allowing residents more attractive public transit options for commute-related trips, and reducing citywide VMT and associated GHG emissions.

The General Plan Update and its companion CAP document recognize that the largest source of the community's climate change contributions is vehicle travel and, therefore, the CAP has identified feasible measures to reduce emissions from the on-road transportation sector, including from passenger vehicles. The development envisioned by the General Plan Update is intended to reduce the need to drive (i.e., lower VMT) by improving access by sidewalks, pathways, and trails, and by encouraging a more compact urban form that arranges land uses close to where people live to give them options for moving around with or without a vehicle. It promotes maintaining an urban forest of trees, parks, and landscaping, connecting pedestrian paths and bikeways throughout the city to encourage active transportation, giving priority to transit, and offering incentives for telecommuting and carpooling. The General Plan Update also recognizes that changes in vehicle technology will reduce GHG emissions and includes policies to increase the use of electric or zero emissions vehicles in the City's vehicle fleet and by residents and businesses. Transit services are also envisioned as being powered by electricity or zero emissions technologies.

The General Plan Update has been developed to help support future development that reduces local and regional VMT while promoting land use patterns that promote alternative transportation modes. The General Plan Update goals and policies discussed above are consistent with Connect SoCal and would support the SCAG region in achieving its SB 375 emissions reduction targets. The General Plan Update would not conflict with the SCAG region's achievement of SB 375 emissions reduction targets. This impact would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.8-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.8-2 would be less than significant.

Impact 5.8-3: The proposed project would be consistent with the State's ability to achieve the 2030 reduction target of SB 32. [Threshold GHG-2]

As discussed under Impact 5.8-1, the implementation of the General Plan Update would result in growth in population and the development of new residential and nonresidential projects. Development under the proposed General Plan Update would result in GHG emissions that would contribute to climate change. However, State and federal legislative actions are anticipated to result in reductions in emissions from specific activities in the future and would, therefore, reduce overall communitywide GHG emissions from these activities even as the city continues to grow through implementation of the General Plan Update. In addition to legislative reductions to emissions from future activities in the city, the General Plan Update includes goals and policies that would support reductions in emissions from existing and future activities in the city (see Section 5.8.3).Update Also, the CAP is an implementation mechanism for the General Plan Update policies and includes quantified GHG reduction strategies estimates that will further support GHG reductions from existing and future development in the city.

As discussed in Section 5.8.4.1.1, *Methodology*, the CAPUpdate is a qualified "plan for the reduction of greenhouse gases" that could allow future projects in the city to tier from the GHG analysis in the EIR, in accordance with CEQA Guidelines Section 15183.5. The CAP has been

developed to meet the requirements of a qualified "plan for the reduction of greenhouse gases" listed in CEQA Guidelines Section 15183.5(b)(1). Specifically, the CAP includes a GHG emissions reduction target for 2030 that aligns with the State's targets established in SB 32 of reducing emission 40 percent below 1990 level by 2030. This target establishes a level, based on substantial evidence found in the CAP's appendices, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable, which is requirement of a qualified "plan for the reduction of greenhouse gases." As shown in Table 5.8-10, *General Plan Update Target Reduction from 2018 Baseline Emissions Levels of 2030*, the established GHG reduction target for 2030 in the CAP is 980,934 MTCO₂e and requires a reduction of 167,864 MTCO₂e from 2018 levels by 2030 to achieve this goal. Table 5.8-10 also includes the total emissions reductions achieved by the collective implementation of all CAP strategies for the year 2030. which would be 186,840 MTCO₂e. As a result, implementation of the CAP would allow the City to achieve and exceed its 2030 target of reducing its emissions by 31 percent from 2018 levels (i.e., reducing annual communitywide emissions to 980,934 MTCO₂e).

Table 5.8-10	General Plan Update Target Reduction from 2018 Baseline Emissions Levels
	by 2030

Emissions	2030	2040
Target Percentage Below 2018 Baseline GHG Emission Levels	31%	47%
GHG Emissions Target (MTCO2e)	980,934	722,985
GHG Reductions Needed from Forecast GHG Emissions to Meet Targets (MTCO $_2$ e)	166,503	339,478
Total Reductions from CAP Measures (MTCO2e)	186,840	199,709
Percentage of gap achieved through CAP Measures	111%	59%
City Emissions with CAP (ABAU – CAP Reductions) (MTCO ₂ e)	961,957	862,754

Source: Ascent Environmental 2021.

Notes: MTCO₂e = metric tons of carbon dioxide equivalents.

As discussed above and illustrated in Table 5.8-10, through implementation of the General Plan, Update including the CAP, the City would achieve GHG emissions reductions in alignment with the Statewide target for 2030 established in SB 32. As a result, implementation of the General Plan Update would not be inconsistent with the State's ability to achieve the 2030 reduction target of SB 32. Therefore, this impact is less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.8-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.8-3 would be less than significant.

Impact 5.8-4: The proposed project would be inconsistent with the State's ability to achieve the long-term reduction goals of Executive Orders S-3-05, B-30-15, and B-55-18. [Threshold GHG-2]

The General Plan Update horizon year is 2040 and does not extend to the year 2050. As a result, an interim CAP target for 2040 was established by the City in the CAP that is consistent with the pace of reductions needed by 2040 to reduce emissions to 80 percent below 1990 levels by 2050, as established in Executive Orders B-30-15 and S-3-05. This impact analysis compares future emissions in 2040 under implementation of the General Plan Update and the CAP to the levels needed to achieve the City's 2040 reduction target to evaluate inconsistencies with the State's long-term reduction goals of Executive Orders B-30-15 and S-3-05 (80 percent below 1990 levels by 2050) and B-55-18 (carbon neutrality no later than 2045). Because Executive Order B-55-18 calls for net zero GHG emissions no later than 2045, it sets a more aggressive GHG reduction goal than Executive Orders B-30-15 and S-3-05. Therefore, for purposes of this analysis, if the City's 2040 communitywide GHG emissions would not achieve the City's 2040 reduction target, then such emissions would be considered inconsistent with the State's ability to achieve the long-term reduction goals of Executive Orders S-3-05, B-30-15, and B-55-18.

As shown in Table 5.8-9 in Impact 5.8-1, the strategies in the CAP, if fully implemented, would achieve a total reduction of 199,709 MTCO₂e by 2040. These reductions place the City's post-2030 communitywide emissions on a downward trajectory that makes substantial progress toward the City's and the State's long-term GHG reduction goals, but they are not sufficient to achieve the 339,478 MTCO₂e of reductions needed to achieve the City's 2040 emissions reduction target. As noted previously, the CAP is a companion document to the General Plan Update that provides more detailed implementation actions to reduce GHG emissions in accordance with the more general GHG reduction policy language in the General Plan. The measures in the CAP achieve 59 percent of the reductions needed to achieve the 2040 emissions target. Because the City, through implementation of the General Plan Update and the CAP, would not achieve its 2040 emissions target, it is not projected that the City would achieve the long-term statewide emissions targets in Executive Orders B-30-15 and S-3-05 to reduce emissions 80 percent below 1990 levels by 2050. For the same reasons, the City would not achieve the State's carbon neutrality goal by 2045 as established in B-55-18 because the CAP does not include CAP strategies that would achieve net-zero emissions by 2045. As a result, this impact would be potentially significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.8-4 would be potentially significant.

Mitigation Measures

There are no feasible mitigation measures.

Level of Significance After Mitigation: Impact 5.8-4 would be significant and unavoidable.

5.8.5 CUMULATIVE IMPACTS

GHG emissions are not confined to a particular air basin but are dispersed worldwide, and the above analysis considers the proposed General Plan Update's contribution to the worldwide emissions. Therefore, the greenhouse gas analysis above is inherently cumulative. Implementation of the proposed project would be inconsistent with the State's long-term reduction goals. Therefore, GHG emissions of future projects and their contribution to global climate change are cumulatively considerable, and GHG emissions impacts would be significant and unavoidable.

5.8.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.8-1, 5.8-2, and 5.8-3.

Without mitigation, this impact would be **potentially significant**:

 Impact 5.8-4 The proposed project would be inconsistent with the State's ability to achieve the long-term reduction goals or Executive Orders S-3-05, B-30-15, and B-55-18.

5.8.7 MITIGATION MEASURES

Impact 5.8-4

No feasible mitigation is available to achieve the State's ability to achieve the long-term reduction goals. The 2017 Scoping Plan identifies how the State can reach the 2030 target to reduce statewide emissions by 40 percent from 1990 levels and substantially advance toward the 2050 goal to reduce GHG emissions by 80 percent below 1990 levels. The 2017 Scoping Plan only identifies known commitments and proposed actions that will be taken by the State to achieve the 2030 target. CARB is currently working to develop the 2022 Scoping Plan, which will assess progress toward achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality by 2045. However, at the time of this analysis, the State has not yet published an update to the Scoping Plan for future targets that may be adopted beyond 2030 on the path to meeting the 2050 goal.

The City's CAP includes a comprehensive set of strategies that achieves the City's 2030 emissions reduction target and makes significant progress towards achieving the City's 2040 target. The General Plan Update includes Policy RC-6.5, which directs the City to work toward a goal of reducing emissions to 80 percent below 1990 levels by 2050 and achieving carbon neutrality by 2045. Additionally, as stated in the CAP Chapter 4, Implementation and Monitoring, the City would continue to monitor the status of communitywide GHG emissions over time; monitor and report on progress toward achieving the GHG reduction targets through implementation of the General Plan Update and CAP; periodically prepare updates to the CAP, and, identify new or modified GHG reduction measures as-needed that would maintain the City on a path of a downward emissions trajectory in alignment with the longer-term, post-2030 targets that may be set by the State or others in the future. This process would involve updates to the CAP in response to post-2030 emissions reduction targets and future

updates to the CARB Scoping Plan that could be approved by the State, considering the State's long-term 2050 emission reduction goal established by Executive Orders S-3-05 and B-30-15 and the carbon neutrality goal of no later than 2045 provided in Executive Order B-55-18.

Despite the General Plan Update policies and ambitious set of CAP GHG reduction strategies that would be implemented, communitywide emissions reductions in 2040 under General Plan Update implementation would not achieve the interim level of reductions needed to be in alignment with long-term statewide emissions reduction goal for 2050 or carbon neutrality goal for 2045. No additional mitigation or information regarding future available technology advancements or future State plans for achieving post-2030 emission reductions beyond the measures included in the CAP are available at this time that can be further quantified.

Reducing the amount of development could reduce traffic, which is a significant source of GHG; however, the reduction in density would make development in some of the focus areas difficult because population density is essential to creating a walkable housing and business environment that reduces VMT and consequently GHG. Further, the no-development alternative would result in a similar determination because the existing GHG emissions exceed the target levels and, without the CAP and other design features that would reduce GHG, reductions would not occur. Therefore, there is no additional feasible mitigation available beyond the measures in the CAP to reduce future GHG emissions under implementation of the General Plan Update.

5.8.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

There are no feasible mitigation measures that would reduce potential impacts as a result of GHG emissions to a level that is less than significant. Therefore, impacts would remain significant and unavoidable.

5.8.9 REFERENCES

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5.9 HAZARDS AND HAZARDOUS MATERIALS

Chapter Overview

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts from implementation of the Rancho Cucamonga General Plan Update on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations in the city of Rancho Cucamonga and its sphere of influence (SOI). Cumulative impacts related to hazards and hazardous materials would be within the city and SOI boundary. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary.

Chapter Overview

Buildout of the proposed General Plan would include construction activities and the operation of uses that would handle, store, or transport hazardous materials. There is a substantial regulatory framework that has been promulgated at the federal, State, and regional level that would apply to construction and operation of uses within the city. Compliance with these regulations would be required by future development in the city and would reduce the proposed General Plan's impact related to hazards or hazardous materials to a less than significant level.

Heart of the Matter

Natural and human-caused hazards have the potential to harm people and things. It is prudent to plan for emergencies and uncertainty that can threaten the safety and security of residents and businesses. Rancho Cucamonga is located along major ground and air transportation corridors. As a result, a variety of human-caused hazards associated with air and ground transportation could impact the community. Proximity to airports requires consideration for land uses and development patterns to ensure airport operations will not conflict with surrounding uses. The release of hazardous materials is another type of human-caused hazard that could impact residents and businesses. Numerous types of hazardous materials and chemicals are transported and used throughout homes and businesses within the city. A majority of the transportation routes used to transport these materials include major roadways, freeways, and rail lines. Interstate 15 (I-15) and State Route 210 (SR-210) are located within Rancho Cucamonga, and Interstate 10 (I-10) is less than a mile south of the city limit.

5.9.1 ENVIRONMENTAL SETTING

Hazardous materials are substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (e.g., household cleaners, industrial solvents, paints, pesticides) and manufacturing (e.g., electronics, newspapers, plastic products) Examples of hazardous materials are petroleum, natural and synthetic gas, and other toxic chemicals that may be used in agriculture or commercial and industrial uses, businesses, hospitals, and

households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

The term "hazardous materials," as used in this section, includes all materials defined in the California Health and Safety Code:

A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (§§ 25411, 25501)

Federal and state hazardous waste definitions are similar, but different enough that separate classifications are in place for federal Resource Conservation and Recovery Act (RCRA) hazardous wastes and state non-RCRA hazardous wastes.

5.9.1.1 Regulatory Setting

Responsible agencies that regulate hazardous materials and waste include:

Federal Agencies

US Environmental Protection Agency

The EPA is the primary federal agency that regulates hazardous materials and waste. In general, the EPA develops and enforces regulations that implement environmental laws enacted by Congress. The agency 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. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the RCRA and in cooperation with state and tribal partners, the Waste Management Division manages a hazardous waste program, and underground storage tank program, and a solid waste program, which includes development of waste reduction strategies such as recycling. The EPA has also promulgated regulations for the transport of hazardous wastes. These more stringent requirements include tracking shipments with manifests to ensure that wastes are delivered to their intended destinations.

Occupational Safety and Health Administration

OSHA oversees administration of the Occupational Safety and Health Act, which requires specific training for hazardous materials handlers, provision of information to employees who may be exposed to hazardous materials, and acquisition of material safety data sheets from manufacturers. Material safety data sheets describe the risks associated with particular hazardous materials, and proper handling and procedures. Employee training must include response and remediation procedures for hazardous materials releases and exposures.

US Department of Transportation

The USDOT has developed regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. The US Postal Service has developed additional regulations for the transport of hazardous materials by mail. USDOT regulations specify packaging requirements for different types of materials.

State Agencies

California Environmental Protection Agency

CalEPA was created in 1991 by Governor's Executive Order. Six boards, departments, and offices were placed under the CalEPA umbrella to create a cabinet-level voice for the protection human health and the environment and to ensure the coordinated deployment of state resources. CalEPA oversees hazardous materials and hazardous waste compliance throughout California. Among those responsible for hazardous materials and waste management are the Department of Toxic Substances Control, Department of Pesticide Regulation, and Office of Environmental Health Hazard Assessment. CalEPA also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program), which consolidates and coordinates:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements
- California Accidental Release Prevention Program.

California Department of Toxic Substances Control

DTSC is the department of CalEPA that carries out the RCRA and CERCLA programs in California to protect people from exposure to hazardous substances and wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

State Water Resources Control Board

GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for sites that impact groundwater or have the potential to impact groundwater. The SCRCB identifies sites that require groundwater cleanup (Leaking Underground Storage Tanks, Department of Defense, and Site Cleanup Program) as well as permitted facilities that could impact groundwater (Irrigated Lands, Oil and Gas Production, Operating USTs and Land Disposal sites.)

California Department of Forestry and Fire Protection

CAL FIRE is dedicated to the fire protection and stewardship of over 13 million acres of California's wildlands. The Office of the State Fire Marshal (OSFM) supports CAL FIRE's mission to protect life and property through fire prevention engineering programs, law and code enforcements, and education. OSFM provides for fire prevention by enforcing fire-related laws in state- owned or -operated buildings; investigating arson fires; licensing those who inspect and service fire protection systems; approving fireworks for use in California; regulating the use of chemical flame retardants; evaluating building materials against fire safety standards; regulating hazardous liquid pipelines; and tracking incident statistics for local and state government emergency response agencies. The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and preservation to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The California Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE.

5.9.1.2 Hazardous Materials and Waste Regulations

There are various federal, state, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste, and they are constantly changing. Federal and state statutes as well as local ordinances and plans regulate hazardous waste management. These regulations can reduce the danger hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Federal Regulations

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

The RCRA of 1976 is the principal federal law enacted by Congress that regulates the generation, management, and transportation of waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and tribes the responsibility of issuing permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. The RCRA gave the EPA the authority to control hazardous waste from "cradle to grave," that is, from generation to transport, treatment, storage, and disposal. The RCRA also set forth a framework for the management of nonhazardous wastes. The 1986 amendments to the RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. It should be noted that the RCRA focuses only on active future facilities and does not address abandoned or historical sites.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, commonly known as Superfund, established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in site cleanup decisions, and increased the size of the trust fund to \$8.5 billion. CERCLA also enabled the revision of the National Contingency Plan, which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priority List of Superfund sites.

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted by Congress as the national legislation on community safety. This law helps local communities protect public health, safety, and the environment from chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored onsite to state and local agencies. These reports help communities prepare to respond to chemical spills and similar emergencies.

Section 3131 of EPCRA requires manufacturers to report releases to the environment (air, soil, and water) of more than 600 designated toxic chemicals, report offsite transfers of waste for treatment or disposal at separate facilities, develop pollution prevention measures and activities, and participate in chemical recycling. These annual reports are submitted to the EPA and state agencies. EPCRA Sections 301 through 312 are administered by the EPA's Office of Emergency Management. The EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention Program.

The EPA maintains and publishes a database that contains information on toxic chemical releases and other waste management activities by certain industry groups and federal facilities. This online, publicly available, national digital database is called the Toxics Release Inventory and was expanded by the Pollution Prevention Act of 1990.

Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires state and local governments to prepare mitigation plans that identify hazards, potential losses, mitigation needs, goals, and strategies. It is intended to facilitate cooperation between state and local governments.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 was enacted by Congress to give the EPA the ability to track the 75,000 industrial chemicals currently produced by or imported into the United States. The EPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It then can control these chemicals as necessary to protect human health and the environment. The Act supplements other federal statutes, including the Clean Air Act and the Toxics Release Inventory under EPCRA.

Hazardous Materials Transportation Act

The USDOT regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations (CFR). State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 CFR reflects laws passed by Congress as January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies and the American Red Cross that: 1) provide the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local government overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

State

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and California Code of Regulations (CCR), Title 19, Section 2729 describe the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material inventory disclosing hazardous materials stored, used, or handled on-site. A business that uses hazardous materials, or mixtures containing them, in certain quantities must establish and implement a business plan.

Tanner Act (Assembly Bill 2948)

Although numerous state policies deal with hazardous waste, the most comprehensive is the Tanner Act (California Civil Code § 1793.22), which was adopted in 1986. The Tanner Act governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities in California. To be in compliance with the Tanner Act, local or regional hazardous waste management plans need to include provisions that define: 1) the planning process for waste management, 2) the permit process for new and expanded facilities, and 3) the appeals process to the state available for certain local decisions.

California Building Code

The state of California provided a minimum standard for building design through California Building Code (CBC), which is in Part of 2 Title 24 of the CCR. The CBC is based on the International Building Code, modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan checked by City and county building official for compliance with the CBC.

State Hazardous Waste Management Programs

Underground Storage Tank Program

Releases of petroleum and other products from USTs are the leading source of groundwater contamination in the United States. The RCRA Subtitle I establishes regulations governing the storage of petroleum products and hazardous substances in USTs and the prevention and cleanup of leaks. In EPA Region 9 (California, Arizona, Hawaii, Nevada, Pacific Islands, and over 140 tribal nations) the UST program operates primarily through state agency programs with EPA oversight. In California, the State Water Resources Control Board (SWRCB), under the umbrella of CalEPA, provides assistance to local agencies enforcing UST requirements. The purpose of the UST program is to protect public health and safety and the environment from releases of petroleum and other hazardous substances. The program consists of four elements: leak prevention, cleanup, enforcement, and tank tester licensing. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs, including groundwater analytical data, the surveyed locations of monitoring wells, and other data. The SWRCB's GeoTracker system currently has information submitted by responsible parties for over 10,000 leaking UST (LUST) sites statewide and has been extended to include all SWRCB groundwater cleanup programs, including the LUST, non-LUST (Spill, Leaks, Investigation, and Cleanup), Department of Defense, and landfill programs.

Hazardous Materials Disclosure Programs

Both the federal government (CFR, EPA, SARA, and Title III) and the state (Health and Safety Code, Division 20, Chapter 6.95, §§ 2500-25520; 19 CCR, Chapter 2, Subchapter 3, Article 4, §§ 2729-2734) require all businesses that handle more than specified amount of hazardous materials or extremely hazardous materials, termed a reporting quantity, to submit a hazardous materials emergency/contingency plan (also known as a hazardous materials business plan) to their local Certified Unified Program Agency (CUPA). The responsible CUPA in San Bernardino County is the San Bernardino County Environmental Health Division, which

is responsible for conducting compliance inspections of regulated facilities in Rancho Cucamonga.

The hazardous materials business plan includes the business owner/operator identification page, hazardous materials inventory chemical description page, and an emergency response plan and training plan. Business plans must include an inventory of the hazardous materials at the facility. The entire hazardous materials business plan needs to be reviewed and recertified every three years. Business plans are required to include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures to follow for immediate notification to all appropriate agencies and personnel of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel. All facilities must keep a copy of their plan onsite.

Hazardous materials business plans are designed to be used for responding agencies, such as the San Bernardino County Fire Department, during a release or spill to allow for a quick and accurate evaluation of each situation for appropriate response. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. If a release involves a hazardous substance listed in Title 40 of the CFR in an amount equal to or exceeding the reportable quantity for that material, a notice must be filed with the California Office of Emergency Services within 15 days of the incident.

Hazardous Materials Incident Response

Under Title III of SARA, the Local Emergency Planning Committee (LEPC) is responsible for developing an emergency plan for preparing for and responding to chemical emergencies in that community. The State Emergency Response Commission (SERC) established six emergency planning districts. The SERC appointed a LEPC for each planning district and supervises and coordinates their activities.

The emergency plan developed by the LEPCs must include:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting exercises to test the plan.

The plan is reviewed by the SERC and publicized throughout the community. The LEPC is required to review, test, and update the plan each year.

Hazardous Materials Spill/Release Notification Guidance

All significant spills, releases, or threatened releases of hazardous materials must be immediately reported. Federal and state emergency notification are required for all significant releases of hazardous materials. Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. The following state statutes require emergency notification of a hazardous chemical release:

- Health and Safety Codes, Sections 25270.7, 25270.8, and 25507
- Vehicle Code, Section 23112.5
- Public Utilities Code, Section 7673 (PUC General Orders #22-b, 161)
- Government Code, Sections 51018, 8670.25.5(a)
- Water Code, Sections 13271, 13272
- California Labor Code, Section 6409.1(b)10.

In addition, all releases that result in injuries or workers harmfully exposed must be immediately reported to California OSHA (California Labor Code, Section 6409.1[b]). Additional reporting requirements are in the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code.

California Accidental Release Prevention Program

The CalARP became effective on January 1, 1997, in response to Senate Bill 1889. CalARP replaced the California Risk Management and Prevention Program. Under CalARP, the Governor's Office of Emergency Services must adopt implementing regulations and seek delegation of the program from the EPA. CalARP aims to be proactive and, therefore, requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. In most cases, local governments will have the lead role for working directly with businesses in this program. The San Bernardino County Fire Department is the CUPA designated as the administering agency for CalARP.

Regional

Local Hazard Mitigation Plan

The Local Hazard Mitigation Plan (LHMP) serves to reduce injury, loss of life, property damage, and loss of services from natural disasters. This LHMP provides a comprehensive analysis of the natural and human-caused hazards that threaten the city, with a focus on mitigation, allowing the city to remain eligible to receive additional federal and state funding to assist with emergency response and recovery, as permitted by the federal Disaster Mitigation Act of 2000 and California Government Code Sections 8685.9 and 65302.6; and it complements the efforts undertaken by the Safety Element. The LHMP complies with all requirements set forth under the federal Disaster Mitigation Act of 2000 and received approval from the Federal Emergency Management Agency (FEMA) in 2021.

Local

City of Rancho Cucamonga General Plan: Chapter 8, Public Health and Safety

State law requires that the General Plan include an element that identifies hazards such as flooding, wildfire, and ground disturbance (Government Code Section 65302 (g)). The existing General Plan's Public Health and Safety Chapter includes policies intended to reduce injury to people and damage to the city. Relevant issues addressed in the Safety Chapter include seismic and geologic hazards (seismically induced surface rupture, ground shaking, ground failure, slope instability leading to mudslides and landslides, and liquefaction), flooding (includes dam failure), wildland and urban fires, evacuation routes, climate adaptation, and human-caused hazards. Other issues required under this government code section do not apply to the City and are not addressed.

City of Rancho Cucamonga Municipal Code

8.17.180 Hazardous Wastes

No owner, tenant, lessee or occupant of a commercial or residential premises shall place any hazardous waste in any container serviced by the authorized collector.

8.18.190 Emergency and Disaster Operations

During any "state of war emergency," "state of emergency" or "local emergency," as defined in the California Emergency Services Act, Government Code Section 8558, as amended, each emergency medical service vehicle operator shall provide equipment, facilities, and personnel as required by the city manager.

15.04.010 Codes Adoption

The Fire Code in effect in the city is as adopted by the fire district in Ordinance No. FD 57. An excerpt from that ordinance states:

The Rancho Cucamonga Fire Protection District (hereinafter District or Fire District) hereby adopts by reference as the District's Fire Code, the 2019 California Fire Code as published by the California Building Standards Commission, with errata, including Appendix Chapter 4; Appendices A, B, BB, C, CC, H, I, N, and O; and Referenced Standards, with the changes, modifications, amendments, additions, deletions, and exceptions prescribed in Section 4 of this ordinance, and the same are hereby adopted for safeguarding of life, property, and the community from injury; fire; explosion; hazardous materials, substances, devices, conditions, processes, activities, operations, practices, and functions; environmental damage; and economic harm, and providing for the issuance of permits and the collection of fees. Each and all of the regulations, provisions, penalties, conditions, and terms of said Fire Code, a copy of which is on file in the office of the Secretary of the Board of Directors of the Fire District, are hereby referred to, adopted, and made a part hereof as if fully set out in this ordinance, subject only to the amendments and deletions herein.

See Ordinance No. FD 57, which is on file in the City Clerk's office, for the amendments to the 2019 California Fire Code adopted and in effect in the city.

Hazardous Materials

The following standards are intended to ensure that the use, handling, storage, and transportation of hazardous materials comply with all applicable state laws (including but not limited to Government Code Section 65850.2 and Health and Safety Code Section 25505, et seq.) and that appropriate information is reported to the Rancho Cucamonga Fire District as the regulatory authority.

- 1. *Reporting requirements.* All businesses required by state law (Health and Safety Code Section 6.95) to prepare hazardous materials release response plans and hazardous materials inventory statements shall, upon request, submit copies of these plans, including any revisions, to the fire district.
- 2. Underground storage. Underground storage of hazardous materials shall comply with all applicable requirements of state law (including but not limited to Health and Safety Code Section 6.7). Businesses that use underground storage tanks shall comply with the following procedures:
 - a. Notify the fire district of any unauthorized release of hazardous materials prescribed by city, county, state, and federal regulations.
 - b. Notify the fire district and the county health department of any proposed abandoning, closing, or ceasing operation of an underground storage tank and actions to be taken to dispose of any hazardous materials.
 - c. Submit copies of the closure plan to the fire district.
- 3. *Aboveground storage*. Aboveground storage tanks for hazardous materials and flammable and combustible materials may be allowed subject to the approval of the fire district.
- 4. *New development.* Structures adjacent to a commercial supply bulk transfer delivery system with at least six-inch pipes shall be designed to accommodate a setback of at least 100 feet from that delivery system. The setback may be reduced if the planning director, with recommendation from the fire district, can make one or more of the following findings:
 - a. The structure would be protected from the radiant heat of an explosion by berming or other physical barriers.
 - b. A 100-foot setback would be impractical or unnecessary because of existing topography, streets, parcel lines, or easements.
 - c. A secondary containment system for petroleum pipelines and transition points shall be constructed. The design of the system shall be subject to the approval of the fire district.
- Notification required. A subdivider of a development within 500 feet of a pipeline shall notify a new/potential owner before the time of purchase and the close of escrow of the location, size, and type of pipeline. (Code 1980, Section 17.66.040; Ord. No. 855, Section 4, 2012)

Standard Conditions of Approval

There are existing regulations that reduce hazards and hazardous materials impacts. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential hazards and hazardous materials impacts in the city. Existing regulations that reduce hazards and hazardous materials impacts include the standard conditions listed here.

5.9-1: Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbeques and grills, and firebreak fuel modification areas are imposed on new developments.

5.9.1.3 Existing Conditions

There are no airports in Rancho Cucamonga. The nearest airport to the city is the LA/Ontario International Airport, approximately 1.2 miles south of the city's southern boundary. This airport is a commercial service airport, which is defined as a publicly owned airport that has at least 2,500 passenger boardings per year and receives scheduled passenger service. Cable Airport in Upland is approximately 3.5 miles west of Rancho Cucamonga's western boundary. This airport is a general aviation airport (fewer than 2,500 passenger boardings per year; fewer than 100 million pounds of cargo per year; and no scheduled passenger service).

Developed and undeveloped properties within the northern portion of the city are vulnerable to wildfire risks due to their proximity to forested lands and land adapted to periodic wildfire events. New and existing development would need to effectively manage vegetative fuel loads and maintain adequate fuel modification zones to reduce wildfire potential and spread.

The release of hazardous materials is another type of human-caused hazard that could impact residents and businesses. Numerous types of hazardous materials and chemicals are transported and used throughout homes and businesses within the city. A majority of the transportation routes used to transport these materials are major roadways, freeways, and rail lines. I-15 and SR-210 are in Rancho Cucamonga, and I-10 is less than a mile south of the city limit.

5.9.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- H-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.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.
- H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Potential risks associated exposure to wildfire hazards (Threshold H-7) are addressed in Section 5.20 and are not further addressed in this section.

5.9.3 PLANS, PROGRAMS, AND POLICIES

The Safety Element of the General Plan Update, Volume 3, Chapter 2, includes goals and policies aimed at protecting the community from hazards such as hazardous materials and wildland fires:

5.9.3.1 Leadership

- **GOAL S-1 LEADERSHIP.** A city that is recognized for its leadership role in resilience and preparedness.
 - 1. **City Staff Readiness.** Ensure City staff and departments demonstrate a readiness to respond to emergency incidents and events.
 - 2. **Culture of Preparedness.** Promote a culture of preparedness for businesses and residents that empowers them to increase their resilience to hazard related events and a changing climate.
 - 3. **Evacuation Capacity.** Require new developments, redevelopments, and major remodels to enhance the City's evacuation network and facilities and comply with the City's Evacuation Assessment.
 - 4. **WUIFA Access Points.** Require all new developments and redevelopments within the WUIFA to provide a minimum of two points of access by means of public roads that can be used for emergency vehicle response and

evacuation purposes.

- 5. **Enhanced Circulation.** In areas of the city with limited access routes and circulation challenges, require additional roads and improvements to ensure adequate emergency vehicle response and evacuation.
- 6. **Evacuation Road Widths.** Require any roads used for evacuation purposes to provide at least 26 feet of unobstructed pavement width.
- 7. **Maintenance of Plans.** Maintain and regularly update the City's Local Hazard Mitigation Plan (LHMP) as an integrated component of the General Plan, in coordination with the Community Wildfire Protection Plan (CWPP), the Emergency Operations Plan (EOP), the Evacuation Plan, and Standardized Emergency Management System (SEMS) compliant disaster plans to maintain eligibility for grant funding.
- 8. **Regional Coordination.** Ensure regional coordination continues with neighboring jurisdictions, County, State, and Federal agencies on emergency management and risk reduction planning and activities.
- 9. **Mutual Aid.** Ensure mutual aid agreements with Federal, State, local agencies, and the private sector establish responsibility boundaries, joint response services, and multi-alarm and station coverage capabilities.

5.9.3.2 Emerging Hazards

- **COAL S-5 EMERGING HAZARDS.** A built environment that incorporates new data and understanding about changing hazard conditions and climate stressors.
 - 1. **Future Conditions.** Ensure future climatic conditions and public health emergencies are considered as part of community resilience and investment efforts.
 - 2. **Urban Forestry Plan.** Minimize damage associated with wind related hazards and address climate change and urban heat island effects through the development of an urban forestry plan and proper landscaping planting and management techniques.
 - 3. **Soil Transport.** Require that properties with high wind-blown soil erosion potential such as agricultural operations and construction sites prevent soil transport and dust generation wherever possible.
 - 4. **Extreme Heat Vulnerabilities.** Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.

- 5. **Resilience Resources.** Require new developments and redevelopments to incorporate resilience amenities such as, but not limited to community cooling centers, emergency supplies, and backup power that can be used by residents and businesses within a 1/4-mile radius of the location.
- 6. **Underground Utilities.** Promote the undergrounding of utilities for new development, major remodels, and redevelopment.
- 7. **Future Adaptation.** Future climate adaptation-oriented projects will incorporate natural infrastructure to the greatest extent practicable.
- 8. **Climate Resiliency.** Address climate resiliency and inequities through the planning and development process.
- 9. Address High Winds. Require buildings and developments exposed to high wind conditions to incorporate design elements and features that minimize or reduce damage to people, structures, and the community.

5.9.3.3 Human Caused Hazards

- **GOAL S-6 HUMAN CAUSED HAZARDS.** A community with minimal risk from airport hazards and hazardous materials.
 - Planned Development. Promote development patterns that integrate Crime Prevention Through Environmental Design (CPTED) principles that reduce the potential for human-caused hazards.
 - Neighboring Properties. Encourage properties that store, generate, or dispose of hazardous materials to locate such operations as far away as possible from areas of neighboring properties where people congregate.
 - Site Remediation. Encourage and facilitate the adequate and timely cleanup of existing and future contaminated sites and the compatibility of future land uses.
 - Airport Planning. Protect Rancho Cucamonga interests regarding land use and safety by participating in the airport land use planning process for Ontario International Airport.
 - Height Restrictions. Require proposed developments within the Ontario Airport Influence Area meet the height requirements associated with FAR Part 77 standards.
 - Development Near Airport. New development within the Ontario Airport Influence Area shall be consistent with the approved Airspace Protection Zones identified in the latest version of the Airport Land Use Compatibility Plan.
 - Railroad Safety. Minimize potential safety issues and land use conflicts when considering development adjacent to the railroad right-of-way

5.9.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

IMPACT 5.9-1: Project construction and operations of the proposed project could involve the transport, use, and/or disposal of hazardous materials; however, compliance with existing local, state, and federal regulations would ensure impacts are minimized. [Thresholds H-1, H-2, and H-3]

Development in accordance with the General Plan Update would result in transit-oriented corridors, mixed-use infill development, and a complete pedestrian network and connected streets within the city. During construction of future projects throughout the city, new development would potentially involve the use of hazardous materials, such as fuels, lubricants, paints, solvents, and greases in construction equipment and coatings used in construction. The release of hazardous materials is a type of human-caused hazard that could impact residents and businesses. Numerous types of hazardous materials and chemicals are transported and used throughout homes and businesses within the city. A majority of the transportation routes used to transport these materials are major roadways, freeways, and rail lines. I-15 and SR-210 are within Rancho Cucamonga, and I-10 is less than a mile south of the city limit. However, future construction activities would be short term in nature, and the materials used would not require use or storage of hazardous materials in quantities that would pose a substantial safety hazard. Additionally, the use, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur; and all contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Grading and excavation in infill areas may expose construction workers and the public to known or potentially unknown hazardous materials in the soil or groundwater. As summarized below, there are various sites throughout the city that the SWRCB and the DTSC have identified containing hazardous materials, which have the potential to pose health hazards. However, contaminated areas on construction sites would be required to be remediated prior to construction activities. Under the General Plan Update, the City would encourage and facilitate the adequate and timely cleanup of existing and future contaminated sites and the compatibility of future land uses. Remediation would be required to satisfy the appropriate responsible agency—DTSC, RWQCB, or the San Bernardino County Fire Department—and would prevent exposure of people and the environment to these hazards.

New development would potentially involve the demolition of older buildings, which may contain asbestos containing materials (ACM) or lead-based paint (LBP) and could result in potential exposure of workers or residents living near these project sites to these hazardous materials. However, demolition of structures throughout the city for future development would be required to comply with the California Health and Safety Code, Occupational Safety and Health Administration (OSHA), and South Coast Air Quality Management District Rule 1403

related to removal of ACM and LBP. These requirements include the preparation of LBP and ACM surveys and appropriate remediation measures for removal of LBP and ACM during demolition activities; asbestos and lead abatement performed and monitored by certified contractors; and proper labeling, safety training, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Thus, implementation of the General Plan Update would not result in substantial hazards to the public due to the transport, use, and/or disposal of hazardous material. Therefore, impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.9-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.9-1 would be less than significant.

Impact 5.9-2: The project site is not on a list of hazardous materials sites. [Threshold H-4]

According to the SWRCB's GeoTracker database, there are 34 hazardous materials sites in the city, as shown in Table 5.9-1, *Hazardous Materials Sites*. These sites include 29 Leaking Underground Storage Tank (LUST) Cleanup Sites and five Cleanup Program Sites; however, the cases for all 29 sites have been completed and closed.

Site Name	Site Type	Status	Address
A-1 Shell Auto Care/Value Gas	Lust Cleanup Site ¹	Completed - Case Closed	9524 Foothill Blvd
Aeroscientific Corporation/Data Design Labs	Lust Cleanup Site	Completed - Case Closed	7925 Center Street
Air Liquide	Lust Cleanup Site	Completed - Case Closed	12550 Arrow Rte
All State Recycling	Cleanup Program Site²	Completed - Case Closed	8949 Etiwanda Avenue
Alta Loma School District	Lust Cleanup Site	Completed - Case Closed	9390 Baseline Rd.
American Can, Inc.	Lust Cleanup Site	Completed - Case Closed	7125 Amethyst Ave
Arco #1721	Lust Cleanup Site	Completed - Case Closed	9533 Foothill Blvd
B & P Woodgrain Paneling, Inc.	Cleanup Program Site	Completed - Case Closed	8886 Vincent Ave
Chevron #9-4863	Lust Cleanup Site	Completed - Case Closed	8687 Baseline Rd
Circle K #0989	Lust Cleanup Site	Completed - Case Closed	12852 Foothill Blvd
Cumberland Swan	Lust Cleanup Site	Completed - Case Closed	9817 7th St
Deer Creek Car Wash	Lust Cleanup Site	Completed - Case Closed	10340 Foothill Boulevard
Deer Creek Car Wash	Lust Cleanup Site	Completed - Case Closed	10340 Foothill Boulevard
Etiwanda Forest Fire Station	Lust Cleanup Site	Completed - Case Closed	6696 Etiwanda Ave
Etiwanda Generating Station	Cleanup Program Site	Completed - Case Closed	Etiwanda
Fasson - Avery Dennison	Lust Cleanup Site	Completed - Case Closed	9292 9th St
General Dynamics Facility	Cleanup Program Site	Completed - Case Closed	10900 4th St Bldg#600
Jim's Texaco	Lust Cleanup Site	Completed - Case Closed	8715 Grove Ave
Laird Construction Company	Lust Cleanup Site	Completed - Case Closed	9460 Lucas Ranch Rd
Mobil #18 -Aj6	Lust Cleanup Site	Completed - Case Closed	8477 Archibald Avenue
Pic N Save Distribution	Lust Cleanup Site	Completed - Case Closed	12434 4th St
Pier 1 Imports	Lust Cleanup Site	Completed - Case Closed	9160 Buffalo Ave
Pneu-Draulies	Lust Cleanup Site	Completed - Case Closed	8575 Helms Ave
Proficient Foods	Lust Cleanup Site	Completed - Case Closed	9408 Richmond Place
R And M Service Station	Lust Cleanup Site	Completed - Case Closed	10080 Foothill Blvd

Table 5.9-1 Hazardous Materials Sites

Site Name	Site Type	Status	Address
Rancho Cucamonga Fire Station #174	Lust Cleanup Site	Completed - Case Closed	11239 Jersey Boulevard
Rod's Foodmart/Texaco	Lust Cleanup Site	Completed - Case Closed	8166 Foothill Blvd
Ryder Truck Leasing	Lust Cleanup Site	Completed - Case Closed	9608 Santa Anita Ave
Ryder Truck Rentals	Lust Cleanup Site	Completed - Case Closed	9366 Santa Anita Ave
Sterling Can	Cleanup Program Site	Completed - Case Closed	8939 Etiwanda Avenue
Tamco	Lust Cleanup Site	Completed - Case Closed	12459 Arrow Hwy
Thrifty Oil #320	Lust Cleanup Site	Completed - Case Closed	9888 Foothill Blvd
Tosco/ Circle K Store #5216	Lust Cleanup Site	Completed - Case Closed	7287 Archibald Ave
Unocal #6977	Lust Cleanup Site	Completed - Case Closed	9082 Foothill Blvd

Source: SWRCB 2021.

Notes:

 Leaking Underground Storage Tank (LUST) Cleanup Sites - Sites that have had an unauthorized release (i.e. leak or spill) of a hazardous substance, usually fuel hydrocarbons, and are being (or have been) cleaned up. In GeoTracker, Leaking Underground Storage Tank (LUST) sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank", or "LUFT" sites) which are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

2. Cleanup Program Sites – Sites that include all "non-federally owned" sites that are regulated under the State Water Resources Control Board's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. Cleanup Program Sites are also commonly referred to as "Site Cleanup Program sites". Cleanup Program Sites are varied and include but are not limited to pesticide and fertilizer facilities, rail yards, ports, equipment supply facilities, metals facilities, industrial manufacturing and maintenance sites, dry cleaners, bulk transfer facilities, refineries, mine sites, landfills, RCRA/CERCLA cleanups, and some brownfields. Unauthorized releases detected at Cleanup Program Sites are highly variable and include but are not limited to hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents, to name a few.

Additionally, according to the DTSC's EnviroStor database, there are 24 toxic substance sites within the city, including 7 voluntary cleanup sites, 9 school investigation sites, 6 tiered permit sites, 1 school cleanup site, and 1 non-operating site, as shown in Table 5.9-2, *Toxic Substance Sites*.

Project Name	Status	Project Type	Address
Former Town Center Cleaners	Active	Voluntary Cleanup ¹	9116 East Foothill Boulevard
A-1 Cleaners (Former)	Active	Voluntary Cleanup	8780 Baseline Road
Allmark Plaza	Active	Voluntary Cleanup	10060-10080 Arrow Route

Table 5.9-2 Toxic Substance Sites

Project Name	Status	Project Type	Address
Alta Loma High School	No Further Action	School Investigation ²	8880 Base Line Road
Arbors Elementary School	No Further Action	School Investigation	Victoria Park Lane/Base Line Road
Auditorium And Health Science Classroom Bldg. At Rancho Cucamonga High School	No Action Required	School Investigation	11801 Lark Drive
Avery Dennison-Mpd	Inactive - Needs Evaluation	Tiered Permit ³	9292 Ninth Street
Dp Etiwanda	Active	Voluntary Cleanup	8822 Etiwanda Avenue
East Banyan School	No Action Required	School Investigation	13639 Banyan Street
Etiwanda Elementary School	Certified	School Cleanup	7128-7192 Etiwanda Avenue
Fontana Steel, Inc.	No Further Action	Voluntary Cleanup	12451 Arrow Route
Former Rancho C Cleaners	Active	Voluntary Cleanup	8782 19th Street
Hellman Elementary School	Inactive - Needs Evaluation	School Investigation	6th Street/Hellman Avenue
InterMetro Industries	Inactive - Needs Evaluation	Tiered Permit	9393 Arrow Highway
Metal Coaters Of California	Certified Operations and Maintenance - Land Use Restrictions Only	Tiered Permit	9133 Center Avenue
Miller Elementary School	No Further Action	School Investigation	13051 Miller Avenue
Mulberry Early Educational Center	No Further Action	School Investigation	Archibald Avenue/Arrow Route
RC Plaza	No Further Action	Voluntary Cleanup	8013 Archibald Avenue
Robert Mfg. Co	Closed	Non- operating ⁴	10667 Jersey Blvd

Project Name	Status	Project Type	Address
Robert Mfg. Co.	Inactive - Needs Evaluation	Tiered Permit	10667 Jersey Boulevard
Steelscape, Inc.	Certified Operations and Maintenance - Land Use Restrictions Only	Tiered Permit	11200 Arrow Rte.
The Hartwell Corp.	Certified / Operation & Maintenance	Tiered Permit	9810 6th St
West Banyon Alternative School	No Further Action	School Investigation	6012 East Ave
West Banyon School	No Further Action	School Investigation	13149 Summit Avenue

Source: DTSC 2021.

1. Voluntary Cleanup – Identifies sites are sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

2. School Investigation/Cleanup Sites - Identifies proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. School sites are further defined as "Cleanup" (remedial actions occurred) or "Evaluation" (no remedial action occurred) based on completed activities. All proposed school sites that will receive State funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight.

3. Tiered Permit Sites - A corrective action cleanup project on a hazardous waste facility that either was eligible to treat or permitted to treat waste under the Tiered Permitting system. Facilities in this category fall under the Permit by Rule (PBR) tier or Conditionally Authorized or Exempt tiers.

4. Non-operating Sites - A Treatment, Storage, Disposal or Transfer Facility (TSDTF) with no operating hazardous waste management unit(s).

Since there are sites undergoing investigation and/or remediation within the city, hazardous substance contamination on or adjacent to specific project developments in the city could impact existing residents and/or employees in the city. Future development in accordance with implementation of the General Plan Update may be impacted by hazardous substance contamination remaining from historical operations on a particular site. However, properties contaminated by hazardous substances are regulated at the federal, state, and local levels and are subject to compliance with stringent laws and regulations for investigation and remediation. Therefore, impacts resulting from buildout of the General Plan Update would be less than significant with the compliance with existing laws and regulations.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.9-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.9-2 would be less than significant.

Impact 5.9-3: The project site is located in the vicinity of an airport or within the jurisdiction of an airport land use plan. [Threshold H-5]

Rancho Cucamonga is located along major ground and air transportation corridors. As a result, a variety of human-caused hazards associated with air and ground transportation could impact the community. Proximity to airports requires consideration for land uses and development patterns to ensure airport operations will not conflict with surrounding uses. The city is approximately 3.2 miles north of the Ontario International Airport and 4.5 miles east of Cable Municipal Airport in Upland. The southwestern portion of the city (south of Church Street east to approximately Etiwanda Avenue) is in the Ontario International Airport Influence Area; thus, compliance with applicable regulations of the Federal Aviation Administration (FAA) would be required, and the Airport Land Use Compatibility Plan would be airport-related safety, noise, airspace protection, and overflight factors. The City of Rancho Cucamonga participates in the airport land use planning process for Ontario International Airport, and new development in the Ontario Airport Influence Area would be consistent with the approved Airspace Protection Zones identified in the latest version of the Airport Land Use Compatibility Plan. Therefore, impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.9-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.9-3 would be less than significant.

Impact 5.9-4: Project development would not affect the implementation of an emergency responder or evacuation plan. [Threshold H-6]

Future development under the proposed General Plan would result in construction activities that could temporarily affect roadways as a result of lane closures or narrowing for roadway and/or utility improvements. This could affect emergency response times or evacuation routes. The proposed project would increase the number of people who may need to evacuate the Planning Area in the event of an emergency. All existing roadway modifications and new roadways that would occur with implementation of the proposed General Plan to accommodate future growth must be constructed based on industry and City design standards. Future roadways in the Planning Area would also be required to demonstrate compliance with the Fire Department requirements pertaining to access/egress to ensure adequate emergency access. Proposed General Plan Policy S-1.1 requires additional roads and improvements in areas of the city with limited access routes and circulation challenges to ensure adequate emergency vehicle response and evacuation; and proposed Policy S-1.2 requires any roads used for evacuation purposes to provide at least 26 feet of unobstructed pavement width. Implementation of these policies would minimize the potential for a roadway design that could hinder its use for emergency response or evacuation.

In addition, the City has developed and adopted an LHMP as an integrated component of the General Plan. The LHMP reduces injury, loss of life, property damage, and loss of services from natural disasters and provides a comprehensive analysis of the natural and human-caused hazards that threaten the city, with a focus on mitigation. This allows the City to remain eligible to receive additional federal and state funding to assist with emergency response and recovery, as permitted by the federal Disaster Mitigation Act of 2000 and California Government Code Sections 8685.9 and 65302.6, and it complements the efforts undertaken by the Safety Element. The LHMP complies with all requirements under the federal Disaster Mitigation Act of 2000 and received approval from the Federal Emergency Management Agency (FEMA) in 2021. In addition to the LHMP, the City would implement an Emergency Operations Plan (EOP), a Community Wildfire Protection Plan (CWPP), and an Evacuation Assessment to provide the framework for responding to major emergencies or disasters. Therefore, impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.9-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.9-4 would be less than significant.

5.9.5 CUMULATIVE IMPACTS

Past, existing, and planned development in the city could pose risks to public health and safety related to the use, storage, handling, generation, transport, and disposal of hazardous materials and wastes. For the cumulative hazards and hazardous materials impact analysis, the cumulative setting is the city and SOI and surrounding region. Hazardous materials contamination impacts, including remediation activities to protect public health and safety, are site specific and do not combine with the effects on other sites to result in a cumulative effect. No further analysis of this impact is necessary. In addition, as discussed above, there is a substantial regulatory framework that that has been promulgated at the federal, State, and regional level that would also apply to construction and operation of uses outside the city. Compliance with these regulations in jurisdictions outside the city would be required and would have the same mitigating effect as in the City of Rancho Cucamonga. Consequently, the proposed General Plan's contribution to any potential cumulative impact related to hazards or hazardous materials would be less than considerable and less than significant.

5.9.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.9-1 through 5.9-4.

5.9.7 MITIGATION MEASURES

None required.

5.9.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation mesures are required.

REFERENCES

Department of Toxic Substances Control. EnviroStor. 2021. https://www.envirostor.dtsc.ca.gov/public/

Rancho Cucamonga Municipal Code. 2021. http://qcode.us/codes/ranchocucamonga/

State Water Resources Control Board. GeoTracker. 2021. https://geotracker.waterboards.ca.gov/

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5.10 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) describes the regulatory framework and existing conditions related to hydrology and water in the City of Rancho Cucamonga and its sphere of influence (SOI).

Chapter Overview

This chapter concludes that compliance with local, state, and federal regulations and the policies of the proposed General Plan Update is the most effective way to reduce impacts to groundwater, drainage, hydrology, and water quality. Individual projects would require project-specific best management practices (BMP) to ensure compliance with regulations governing water quality.

Heart of the Matter

Water quality impacts are not confined to one specific project and occur on a regional scale. Reliance on project-specific BMPs implemented during construction and operational activities as well as compliance with regulations and the proposed General Plan policies can reduce water quality impacts in the Plan Area.

5.10.1 ENVIRONMENTAL SETTING

5.10.1.1 Regulatory Background

Federal Regulations

Clean Water Act

The federal Water Pollution Control Act (or Clean Water Act [CWA]) is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA)—or in the case of California, the State Water Board and Regional Water Quality Control Boards-authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to completely end all discharges and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates direct and indirect discharge of pollutants; sets water quality standards for all contaminants in surface waters; and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges; requires states to establish sitespecific water quality standards for navigable bodies of water; and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA funds the construction of sewage treatment plants and recognizes the need for planning to address nonpoint sources of pollution. Section 402 of the CWA requires a permit for all point-source discharges of any pollutant (except dredge or fill material) into waters of the United States.¹

¹ A "point source" is a discernible, confined, and discrete conveyance, such as pipe, ditch, or channel.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program (CWA Section 402), all facilities that discharge pollutants from any point source into a water of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTW), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect discharges. Municipal sources are POTWs that primarily receive domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting.

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All municipalities with storm drain systems that serve a population of 50,000 or more, construction sites one acre or more in size, and any other point source discharges of pollutants to jurisdictional waters must file for and obtain an NPDES permit. The City of Rancho Cucamonga is subject to a Phase 1 NPDES permit (Order No. R8-2010-0036; NPDES No. CAS 618036). New development would be required to implement erosion and sediment control plans, including appropriate erosion and sediment control BMPs, Storm Water Pollution Prevention Plans (SWPPP), and water quality management plans (WQMP), as applicable. Further, projects must ensure, to the maximum extent practicable standard, that runoff from development projects does not cause a nuisance to adjoining or downstream properties and stream channels and that appropriate control measures are taken to reduce erosion and maintain stream geomorphology. Projects are also required to emphasize implementation of low-impact development (LID) principles, where feasible, and appropriately maintain urban runoff conveyance systems from development projects.

Safe Drinking Water Act

The federal Safe Drinking Water Act regulates drinking water quality nationwide and gives the EPA the authority to set drinking water standards, such as the National Primary Drinking Water regulations, or "primary standards." The primary standards protect drinking water by limiting the levels of specific contaminants that can adversely affect public health. All public water systems that provide service to 25 or more individuals must meet these standards. Water purveyors must monitor for contaminants on fixed schedules and report to the EPA when a maximum contaminant level (MCL) is exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any use of a public water system. Contaminants

include organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer, radionuclides (e.g., uranium and radon), and microbial contaminants (e.g., coliform and E. coli). The MCL list typically changes every three years as the EPA adds new contaminants or revises MCLs. The California Department of Public Health's Division of Drinking Water and Environmental Management is responsible for implementation of the Safe Drinking Water Act in California.

Federal Urban Flooding Awareness Act

In 2015, Congress passed the Urban Flooding Awareness Act of 2015. Under this bill, the National Academy of Sciences will conduct a study on urban flooding. It defines "urban flooding" as the inundation of property in a built environment, particularly in more densely populated areas, caused by rain falling on increased amounts of impervious surface and overwhelming the capacity of drainage systems. The bill directs the National Academy of Sciences to evaluate the latest research, laws, regulations, policies, best practices, procedures, and institutional knowledge regarding urban flooding. The findings from this assessment will direct future federal policies on identifying, preventing, and mitigating urban flooding.

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development, identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies called Flood Insurance Studies. Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas on FIRMs.

The Flood Disaster Protection Act requires owners of all structures in identified Special Flood Hazard Areas to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program afforded by FEMA. The program is required to offer federally subsidized flood insurance to property owners in those communities that adopt and enforce floodplain management ordinances that meet minimum criteria established by FEMA. The National Flood Insurance Reform Act of 1994 further strengthened this program by providing a grant program for state and community flood mitigation projects. The act also established the Community Rating System, a system for crediting communities that implement measures to protect the natural and beneficial functions of their flood plains, as well as managing erosion hazards.

State Regulations

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code sections 13000 et seq.) is the basic water quality control law for California. Under this Act, the State Water Resources Control Board (SWRCB) has ultimate control over state water rights and water quality policy. In California, the

EPA has delegated authority to issue NPDES permits to the SWRCB and the nine Regional Water Quality Control Boards (RWQCB).

Safe Water Drinking Act

The Safe Water Drinking Act of 1974 regulates public drinking supplies to protect public health and safety. The law is designed to protect drinking water and water sources such as rivers, lakes, reservoirs, springs, and groundwater wells.

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2001, the SWRCB issued a statewide general NPDES Permit for stormwater discharges from construction sites (NPDES No. CAS00002). Under this Statewide General Construction Activity permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or to be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a SWPPP. Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect stormwater runoff and must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a monitoring plan if the site discharges directly to a water body listed on the state's 303(d) list of impaired waters.

Regional Regulations

Water Quality Control Plan for the Santa Ana River Basin

The Water Quality Control Plan for the Santa Ana River Basin (or Basin Plan) seeks to preserve and enhance water quality and to protect the beneficial uses of water bodies in the Santa Ana River watershed. The Basin Plan discusses the existing water quality, beneficial uses of the groundwater and surface waters, and local water quality conditions and problems within the Santa Ana River watershed. The Basin Plan provides water quality standards for water resources in the Santa Ana River and its watershed and includes an implementation plan to maintain these standards. The standards serve as the basis for the basin's regulatory programs.

Basin Plan implementation occurs primarily through issuance of individual Waste Discharge Requirements (WDRs); discharge prohibitions; water quality certifications; programs for salt management, nonpoint sources, and stormwater; and monitoring and regulatory enforcement actions, as necessary.

Municipal Separate Storm Sewer System (MS4) Permit

In 2002, the Santa Ana RWQCB issued a NPDES Stormwater Permit and WDRs (Order No. R8-2002-0012) under the CWA and the Porter-Cologne Act for discharges of stormwater runoff, snowmelt runoff, surface runoff, and drainage within the Upper Santa Ana River watershed in San Bernardino and Riverside counties. This permit expired on April 27, 2007, and was administratively extended by operation of law. The current NPDES MS4 permit (4th iteration)

was issued to the San Bernardino County Flood Control District, County, and cities, including the City of Rancho Cucamonga, in January 2010.

The City of Rancho Cucamonga is within the jurisdiction of the Santa Ana RWQCB and is subject to the waste discharge requirements of the MS4 Permit for San Bernardino County. The County and cities within the county are co-permittees under the MS4 permit and must have legal authority to enforce the terms of the permit in their jurisdictions.

The ultimate goal of the MS4 Permit and the related urban stormwater management program is to protect the beneficial uses of the receiving waters. Beneficial uses refer to the various ways that water can be used for the benefit of people and wildlife (e.g., drinking, swimming, agricultural water supply, and support of aquatic habitats). To implement the requirements of the permit, the County developed guidelines to control and mitigate stormwater quality impacts to receiving waters as a result of new development and redevelopment. The guidelines require the development of a WQMP for certain priority projects that identifies post-construction BMPs to reduce discharges of pollutants into stormwater.

Water Quality Management Plan

The NPDES Permit and WDRs require co-permittees to develop and implement programs for stormwater management within San Bernardino County, which would regulate the discharge of pollutants into stormwater and/or runoff into the storm drain system and receiving waters within the area covered by the NPDES permit.

In compliance with this permit, the San Bernardino County Department of Public Works' Storm Water Program contains guidelines for the preparation of WQMPs by new development and major redevelopment projects of specific land uses and sizes. A WQMP is required as part of the permit process and commits the developer to the implementation of long-term BMPs. Individual WQMPs need to identify pollutants of concern based on the proposed land use and site activities, and select applicable site design, source control, and treatment control BMPs that would effectively prohibit nonstorm water discharges from entering the storm drain system and that would reduce the discharge of pollutants from stormwater conveyance systems to the maximum extent possible. The WQMP also calls for the on-site retention of stormwater to prevent hydrologic conditions of concern—including flooding, erosion, scour, sedimentation, vegetation stress, slope stability, water quality degradation, and altered flow regime at downstream water channels/bodies—if the facilities have not been engineered to their ultimate capacities or if natural conditions are present.

Santa Ana River Mainstream Project

The Counties of Orange, Riverside, and San Bernardino are working with the US Army Corps of Engineers to design and construct the Santa Ana River Mainstream project. This project will provide increased flood protection to the communities within the three counties and will include specific environmental restoration projects. The Mainstream Project covers 75 miles, from the Santa Ana River headwaters to its mouth, providing the upper and lower Santa Ana River Basin with flood protection levels ranging from 100-year to 190-year flood flows. Structural improvements have been completed at Seven Oaks Dam and are planned at Mill Creek Levee, San Timoteo Creek, Prado Dam, Oak Street Drain in Corona, 23 miles of the lower Santa Ana

River, and Santiago Creek. As of 2017, about 95 percent of the reconstruction work in the lower river channel has been completed, with remaining work consisting of bank protection improvements in the Yorba Linda area (under construction) and strengthening of the bridge piers supporting the BNSF Railroad in Corona. The Prado Dam embankment has been raised and the outlet works have been reconstructed to convey discharges of up to 30,000 cubic feet per second. Additional lands for the expansion of the Prado reservoir still need to be acquired, several protective dikes in the Prado basin remain to be built, and the spillway for Prado Dam has yet to be raised. Since Rancho Cucamonga is within the Santa Ana River watershed, this project would improve flood protection in the city while reducing the potential for downstream flooding due to runoff from the city (Santa Ana River Project 2021).

Local Regulations

Floodplain Management Regulations

City of Rancho Cucamonga Municipal Code Chapter 19.12, Floodplain Management Regulations, restricts or prohibits structures and land uses within designated floodplains that do not comply with the regulations. This chapter requires that development be reasonably safe from flooding and not increase the base flood level by more than one foot where base flood elevations have been determined but a floodway has not been designated. Projects that involve alteration or relocation of a watercourse are required to notify adjacent communities and the California Department of Water Resources of the relocation, provide the Federal Insurance Administration and FEMA with evidence of such notification, and ensure that the flood-carrying capacity within the altered or relocated portion of the watercourse is maintained.

Floodplain Management Regulations also require that flood hazard reduction measures be implemented in the floodplain areas, which would include anchoring, flood-resistant materials, drainage around structures, elevation of lowest floor above base flood elevation, floodproofing, elimination of floodwater infiltration or discharges from water and sewer lines, prohibition of floodway encroachment, and mobile home and recreational vehicle standards. Regulations for development in mudslide- and erosion-prone areas are also included.

Stormwater Discharge Regulations

City of Rancho Cucamonga Municipal Code Chapter 19.20 is known as the Storm Water and Urban Runoff Management and Discharge Control Ordinance. The ordinance was adopted to comply with the CWA, the California Porter-Cologne Water Quality Control Act, and the City's NPDES permit and seeks to protect and enhance the quality of water bodies and water courses. The regulations address connections to the City's MS4 system, prohibited discharges, compliance with NPDES permits, implementation of BMPs, spill containment, immediate notification and written notification of accidental discharge, and property owner responsibility for illegal discharges. Sections 19.20.100 and 19.20.110 require that any person undertaking any activity or operation in the city that could potentially cause or contribute to stormwater pollution or a discharge of nonstorm water to the City's MS4 shall comply with all applicable BMPs in the California Storm Water Best Management Practices Handbooks,and applicable NPDES permits to reduce pollutants in stormwater runoff and reduce nonstorm water discharges to the City's MS4 to the maximum extent practicable or to the extent required by law.

Drainage Master Plans

The City has adopted two drainage master plans for the eastern and the western sections of the city. The drainage master plans establish a means to collect revenue from development to offset the cost of constructing the drainage system. The City Master Plan of Drainage-Westside Area applies to the area located primarily between the Deer Creek Channel on the east and the Cucamonga Channel on the west. The Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage, identifies drainage facilities and fees for the area located along the western side of Etiwanda Avenue to the easterly city limits north of 4th Street. These drainage master plans address the flood control needs of a fully developed drainage area and identify the regional and local facilities needed to adequately convey a 100-year storm event.

Areas not covered by the two drainage master plans are expected to provide the needed storm drainage system as outlined in the applicable Specific Plan or Community Plan. Developers within these areas are responsible for completing the necessary drainage facilities not covered by the City's drainage master plans.

Standard Conditions of Approval

There are existing regulations that are intended to protect hydrology and water quality. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for impacts on water resources in the city. Existing regulations include the following standard conditions.

- **5.10-1:** A final drainage study shall be submitted to and approved by the City Engineer prior to final map approval or the issuance of building permits, whichever occurs first. All drainage facilities shall be installed as required by the City Engineer.
- **5.10-2:** Adequate provisions shall be made for acceptance and disposal of surface drainage entering the property from adjacent areas.

5.10.1.2 Existing Conditions

Storm Drainage

Rancho Cucamonga's storm drainage and flood control system provides both regional and local drainage and provides debris basins and spreading grounds designed to reduce mud flows. The City, through its Engineering Services and Public Works Services Departments, is responsible for the localized facilities. The San Bernardino County Flood Control District is responsible for regional flood control facilities. Together, the City and the San Bernardino County Flood Control District coordinate the preparation of regional drainage plans. The City's drainage plans provide a drainage system consisting of regional mainline, secondary regional, and master plan facilities that will adequately convey a 100-year storm event based upon certain drainage criteria.

Groundwater

The Chino Basin and Cucamonga Basin underlie the city. The Chino Basin is one of the largest groundwater basins in Southern California and contains several million acre-feet of water and has an unused storage capacity exceeding 1,000,000 acre-feet. The basin covers about 230 square miles of the upper Santa Ana River Watershed. The location of the Chino Basin is shown on Figure 5.10-1, Water Basin. It is bounded by the Cucamonga Basin and the San Gabriel Mountains to the north; the Rialto-Colton Basin to the northeast; the chain of Jurupa, Pedley, and La Sierra Hills to the southeast and south; the Temescal Basin to the south; the Chino and Puente Hills to the southwest; and the Spadra Basin, San Jose Hills, and the Six Basins to the northwest. San Antonio Creek and Cucamonga Creek drain the Chino Basin area southward and flow into the Santa Ana River. The Chino Basin lies within the counties of Los Angeles, Riverside, and San Bernardino and it includes the cities of Chino, Chino Hills, Eastvale, Fontana, Montclair, Ontario, Pomona, Rancho Cucamonga, and Upland. The Chino Basin was adjudicated under the Chino Basin Judgment, entered on January 27, 1978, by the Superior Court for the County of San Bernardino. The provisions of the Judgment are administered and managed by the court-ordered Chino Basin Watermaster. Pursuant to the most recent safe yield reset effective in 2020, the safe yield in the Chino Basin is currently 131,000 acre-feet per year (CVWD 2021).

The Cucamonga Basin is in the northern part of the Upper Santa Ana Valley and is drained by Cucamonga and the Deer Creeks to the Santa Ana River. The Cucamonga Basin is bounded on the north by alluvium from the San Gabriel Mountains and on the west, east, and south by the Red Hill Fault. The total area of the Cucamonga Basin is approximately 9,530 acres or about 15 square miles. Groundwater in the Cucamonga Basin is found in alluvial deposits. Recharge to the Cucamonga Basin can occur from infiltration of stream flow, percolation of rainfall on the valley floor, irrigation, and underflow from the San Gabriel Mountains (CVWD 2021).

Water Quality

Stormwater in Rancho Cucamonga is discharged into Day Creek, Deer Creek, East Etiwanda Creek, Cucamonga Creek, Mill Creek, Chino Creek, the Santa Ana River, and the Prado Basin along the river. Following are beneficial uses of these receiving waters. Each of these water bodies has at least one present or potential beneficial use or intermittent beneficial use (SARWQCB 2016).

- Municipal and Domestic Supply (MUN): Used for community, military, municipal, or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- Agricultural Supply (AGR): Used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- Industrial Service Supply (IND): Used for industrial activities that do not depend primarily on water quality. These uses may include, but are not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.

- Industrial Process Supply (PROC): Used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, processing water supply and all uses of water related to product manufacture or food preparation.
- Groundwater Recharge (GWR): Used for natural or artificial groundwater recharge for purposes that may include, but are not limited to, future extraction, water quality maintenance, or halting of saltwater intrusion into freshwater aquifers.
- Navigation (NAV): Used for shipping, travel, or other transportation by private, commercial, or military vessels.
- Hydropower Generation (POW): Used for hydroelectric power generation.
- Water Contact Recreation (REC1: Primary Contact Recreation): Used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
- Non-contact Water Recreation (REC 2: Secondary Contact Recreation): Used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.
- Commercial and Sportfishing (COMM): Used for commercial or recreational collection of fish or other organisms, including those collected for bait. These uses may include, but are not limited to, uses involving organisms intended for human consumption.
- Warm Freshwater Habitat (WARM): Used to support warm water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, and fish and wildlife, including invertebrates.
- Limited Warm Freshwater Habitat (LWRM): Used to support warm water ecosystems that are severely limited in diversity and abundance as the result of concrete-lined watercourses and low, shallow, dry weather flows, which result in extreme temperature, pH, and/or dissolved oxygen conditions. Naturally reproducing finfish populations are not expected to occur in LWRM waters.
- Cold Freshwater Habitat (COLD): Used to support coldwater ecosystems that may include, but are not limited to, preservations and enhancement of aquatic habitats, vegetation, and fish and wildlife, including invertebrates.
- Preservation of Biological Habitats of Special Significance (BIOL) waters support designated areas or habitats, including, but not limited to, established refuges, parks, sanctuaries, ecological reserves or preserves, and Areas of Special Biological Significance, where the preservation and enhancement of natural resources require special protection.

- Wildlife Habitat (WILD): Used to support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
- Rare, Threatened, or Endangered Species (RARE): Used to support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered.
- Spawning, Reproduction, and Development (SPWN): Used to support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.
- Marine Habitat (MAR) waters support marine ecosystems that include, but are not limited to, preservation and enhancement of marine habitats, vegetation (e.g., kelp), fish and shellfish, and wildlife (e.g., marine mammals and shorebirds).
- Shellfish Harvesting (SHEL) waters support habitats necessary for filter-feeding shellfish (e.g., clams, oysters, and mussels) collected for human consumption, commercial, or sport purposes.
- Estuarine Habitat (EST) waters support estuarine ecosystems, which may include, but are not limited to, preservation and enhancement of estuarine habitats, vegetation, fish and shellfish, and wildlife such as waterfowl, shorebirds, and marine mammals.

Flood Hazards

Rancho Cucamonga has a history of flooding, including major flood events in 1969, 1977, and 1983, with damaged homes and other buildings, and street wash outs and cave ins (Rancho Cucamonga 2010).

Dam Inundation

Dam failure due to an earthquake, erosion, design flaw, or water overflow during storms can cause inundation hazards in the city. The San Antonio Dam in Upland is west of Rancho Cucamonga, and dam failure could result in inundation hazards in the city. Failure of debris basin slopes may also lead to inundation of downstream areas. Inundation hazard areas include areas downstream of debris basins and a small portion of the southwestern section of the city that could be affected by a breach of the San Antonio Dam in Upland (USACE 1986).

5.10.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

- HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i) Result in a substantial erosion or siltation on- or off-site.
 - ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
 - iii) 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.
 - iv) Impede or redirect flood flows.
- HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

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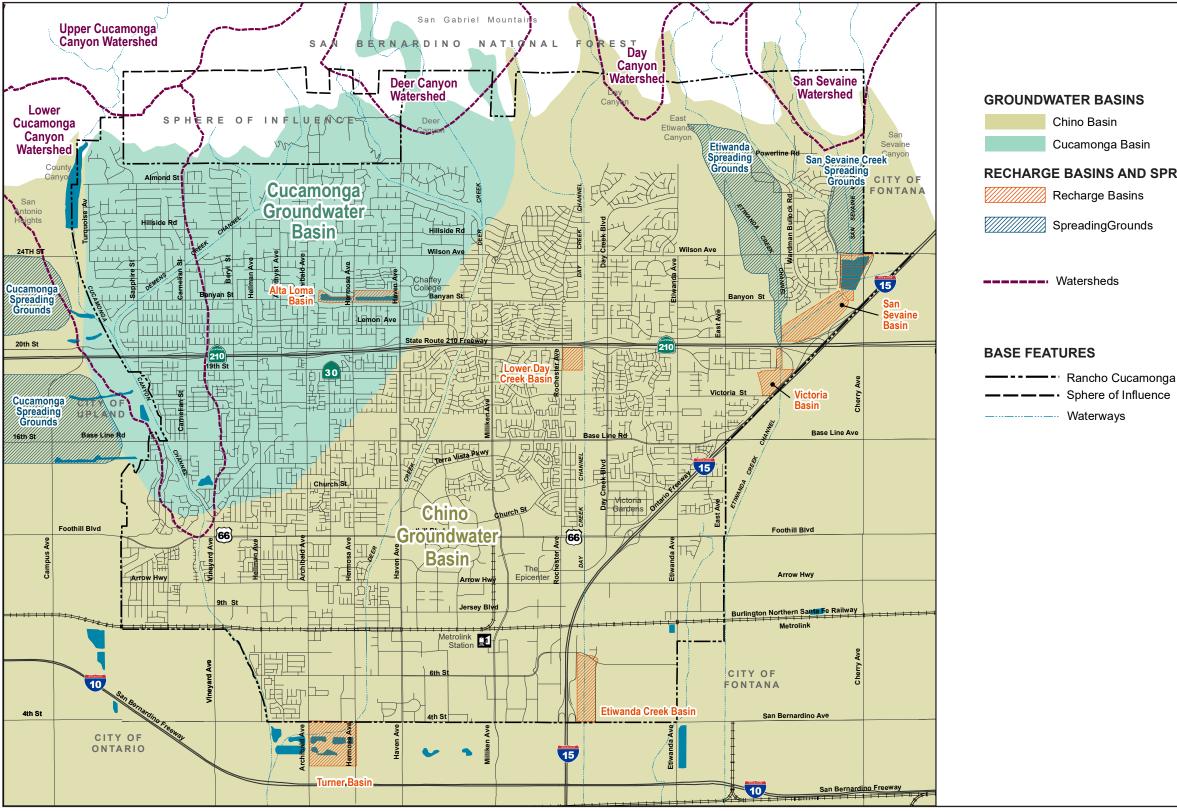


Figure 5.10-1 - Water Basin 5. Environmental Analysis

RECHARGE BASINS AND SPREADING GROUNDS

- Sphere of Influence





PlaceWorks

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5.10.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are policies of the Rancho Cucamonga General Plan Update that are relevant to potential hydrology and water quality impacts from implementation of projects under the General Plan Update.

Open Space Element

- **GOAL OS-1 OPEN SPACE.** A complete, connected network of diverse parks, trails, and rural and natural open space that support a wide variety of recreational, educational and outdoor activities.
- **OS-1.9 Joint Use.** Pursue and expand joint use of public lands that are available and suitable for recreational purposes, including school district properties and flood control district, water district, and other utility properties.

Resource Conservation

- **GOAL RC-2** WATER RESOURCES. Reliable, readily available, and sustainable water supplies for the community and natural environment.
- **RC-2.1 Water Supplies.** Protect lands critical to replenishment of groundwater supplies and local surface waters (Figure RC-3).
- **RC-2.2 Groundwater Recharge.** Preserve and enhance the existing system of stormwater capture for groundwater recharge.
- **RC-2.3 Riparian Resources.** Promote the retention and protection of natural stream courses from encroachment, erosion, and polluted urban runoff.
- **RC-2.4** Waterways as Amenities. When considering new development applications and infrastructure improvements where waterways are onsite, adjacent, or nearby, incorporate the waterway into the design as a feature.
- **RC-2.5** Water Conservation. Require the use of cost-effective methods to conserve water in new developments and promote appropriate water conservation and efficiency measures for existing businesses and residences.
- **RC-2.6** Irrigation. Encourage the conversion of water-intensive turf/landscape areas to landscaping that uses climate- and wildlife-appropriate native or non-invasive plants, efficient irrigation systems, greywater, and water efficient site maintenance.
- **RC-2.7 Greywater.** Allow and encourage the use of greywater to meet or offset onsite non-potable water demand.
- **GOAL RC-6 CLIMATE CHANGE.** A resilient community that reduces its contributions to a changing climate and is prepared for the health and safety risks of climate change.

- **RC-6.12 Reduced Water Supplies.** When reviewing development proposals, consider the possibility of constrained future water supplies and require enhanced water conservation measures.
- **RC-6.14 Designing for Changing Precipitation Patterns.** When reviewing development proposals, encourage applicants to consider stormwater control strategies and systems for sensitivity to changes in precipitation regimes and consider adjusting those strategies to accommodate future precipitation regimes.
- **RC-6.18** Water Sources with Low GHG Emissions. Encourage local and regional water utilities to obtain water from sources with low or no GHG emissions.

Safety Element

- **GOAL S-4 FLOOD HAZARDS.** A community where developed areas are not impacted by flooding and inundation hazards.
- S-4.1 New Essential Facilities (Flood). Prohibit the siting and construction of new essential public facilities within flood hazard zones, when feasible. If an essential facility must be located within a flood hazard zone, incorporate flood mitigation to the greatest extent practicable.
- S-4.2 Flood Risk in New Development. Require all new development to minimize flood risk with siting and design measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and minimization of structures located in floodplains.
- S-4.3 500-Year Floodplain. Promote the compliance of 100-year floodplain requirements on properties located within the 500-year floodplain designation.
- **S-4.4 Flood Infrastructure**. Require new development to implement and enhance the Storm Drain Master Plan by constructing stormwater management infrastructure downstream of the proposed site.
- **S-4.5 Property Enhancements**. Require development within properties located adjacent, or near flood zones and areas of frequent flooding to reduce or minimize run-off and increase retention onsite.
- S-4.6 Regional Coordination. Promote regional flood management and mitigation projects with other agencies (San Bernardino County Flood Control, Army Corps of Engineers, and adjacent jurisdictions) to address flood hazards holistically.
- **S-4.7 Dam Operators**. Coordinate with agencies operating or managing dam facilities that can inundate the city, on operations, maintenance, and training activities and provide the latest Emergency Action Plans annually.

5.10.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.10-1: Development pursuant to the General Plan would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. [Threshold HYD-1]

Urban runoff from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, soil, and animal waste. This runoff can flow directly into local streams or lakes or into storm drains and continue through pipes until it is released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats.

Construction Activities

Clearing, grading, excavation, and construction activities associated with buildout of the General Plan Update may impact water quality due to sheet erosion of exposed soils and subsequent deposition of particulates in local drainages. Grading activities lead to exposed areas of loose soil and sediment stockpiles that are susceptible to uncontrolled sheet flow. Although erosion occurs naturally in the environment, primarily from weathering by water and wind action, improperly managed construction activities can lead to substantially accelerated rates of erosion that are considered detrimental to the environment.

Both state and local regulations effectively mitigate construction stormwater runoff impacts from the buildout associated with the General Plan Update. Chapter 19.04, Grading Standards, of the Rancho Cucamonga Municipal Code contains requirements for grading and site erosion control. Standard condition of approval 5.10-1 requires that storm drainage system improvements in the city be constructed in accordance with the Master Plan of Drainage-Westside Area and the Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage. Standard condition of approval 5.10-2 requires that, prior to final map approval or the issuance of building permits, the project applicant submit a final drainage study to and approved by the City Engineer and that all drainage facilities be installed as required by the City Engineer. Additionally, development of projects with one acre or greater of soil disturbance are required to comply with the Construction General Permit and associated local NPDES regulations to ensure that the potential for soil erosion is minimized on a project-by-project basis.

Project-specific SWPPPs are required in accordance with the site-specific sediment risk analyses based on the grading plans. The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls to mitigate potential pollutant sources. These include, but are not limited to:

- Erosion controls
- Sediment controls
- Tracking controls
- Nonstorm water management
- Materials and waste management
- Good housekeeping practices

Operational Phase

Development resulting from the Rancho Cucamonga General Plan Update may result in longterm impacts to the quality of stormwater and urban runoff, subsequently impacting downstream water quality. Developments pursuant to the General Plan Update could potentially create new sources for runoff contamination through changing land uses. Consequently, implementation of the General Plan Update may have the potential to increase the post-construction pollutant loadings of certain constituent pollutants associated with the proposed land uses and their associated features, such as landscaping and plaza areas.

To help prevent long-term impacts associated with land use changes, development and significant redevelopment would be required to comply with Chapter 19.20, Municipal Separate Storm Sewer System (MS4), of the Rancho Cucamonga Municipal Code, which is the City's Stormwater and Urban Runoff Management and Discharge Ordinance. The intent of Chapter 19.20 is to protect and enhance the quality of watercourses, water bodies, and wetlands within the city in a manner consistent with the federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and the municipal NPDES permit. Chapter 19.20 requires that development and redevelopment projects greater than 5,000 square feet submit a WQMP that includes BMPs during construction and operational activities. Chapter 19.20 indicates that nonpriority and noncategory projects may be required to implement applicable site design LID and local implementation plan requirements. The BMPs, LIDs, and water quality treatment solutions prescribed in project-specific WQMPs would be designed to support or enhance the regional BMPs and efforts implemented by the City as part of its effort to improve water quality. Section 19.20.110 requires that any person undertaking any activity or operation in the city that could potentially cause or contribute to stormwater pollution or a discharge of nonstorm water to the City's MS4 shall comply with all applicable BMPs in the California Storm Water Best Management Practices Handbooks and the County stormwater program's "Report of Waste Discharge" to reduce pollutants in stormwater runoff and reduce nonstorm water discharges to the City's MS4 to the maximum extent practicable or to the extent required by law.

In accordance with the MS4 Permit, the use of LID features would be consistent with the prescribed hierarchy of treatment provided in the Permit: infiltration, evapotranspiration, harvest/reuse, and biotreatment. For areas of a site where LID features are not feasible or do not meet the feasibility criteria, treatment control BMPs with biotreatment enhancement design features would be used to provide treatment. Where applicable, LID features will be analyzed to demonstrate their ability to treat portions of the required design capture volume and reduce the size of downstream on-site treatment control BMPs.

Furthermore, as part of the statewide mandate to reduce trash in receiving waters, the City of Rancho Cucamonga is required to adhere to the requirements of the amended trash total maximum daily load (TMDL). The requirements include the installation and maintenance of trash screening devices at all public curb inlets, grate inlets, and catch basin inlets. The trash screening devices must be approved by the local agency and consistent with the minimum standards of the trash TMDL. New industrial uses (manufacturing and processing) are also required to file a General Industrial Permit with the state and prepare a SWPPP that addresses operational features to control stormwater pollutants and monitoring and reporting requirements.

With the implementation of federal, state, local regulations, and the goals and policies of the General Plan Update, runoff from the construction and operational phases of development pursuant to the General Plan Update would not violate any water quality standards or waste discharge requirements, and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.10-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.10-1 would be less than significant.

Impact 5.10-2: Buildout of the General Plan would generate a substantial increase in water demand but would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. [Threshold HYD-2]

The Cucamonga Valley Water District's (CVWD) main sources of water supply are from groundwater pumped from the Chino Basin and imported surface water. The CVWD also uses groundwater produced from the Cucamonga Basin. CVWD estimates extraction of between 10,250 and 17,630 acre-feet per year from the Chino Basin from 2025 to 2045 and 10,000 acre-feet per year from the Cucamonga Basin during that same time period. These volumes are based on CVWD's share of the "operating safe yield" of the basins.

In 2020, the total water supply was 51,516 acre-feet, and 26,933 acre-feet accounted for groundwater supply; the total water demand was 46,021 acre-feet, according to CVWD's 2020 Urban Water Management Plan (UWMP). The UWMP indicates that the water supply would exceed the water demand for normal, single dry, and multiple dry years from 2025 through 2045. The 2020 UWMP projects a population of 236,573 in 2045, which exceeds the population projected for the proposed General Plan Update (233,088). Consequently, the UWMP overestimates the demand that would be generated by buildout of the General Plan Update.

The policies of the proposed General Plan Update, such as Policies RC-2.1 and RC-2.2, require the replenishment of groundwater and the preservation and enhancement of stormwater capture systems for groundwater recharge. With the implementation of the policies of the General Plan Update, buildout of the General Plan would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.10-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.10-2 would be less than significant.

Impact 5.10-3: Development pursuant to the General Plan would increase impervious surfaces and therefore could alter drainage patterns, but would not increase the potential for erosion and siltation on- or off-site, or create runoff water that would exceed the capacity of storm drain systems, or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. [Thresholds HYD-3 (i), (ii), (iii), and (iv)]

Development within the General Plan area would result in an increase in impervious surfaces. This could result in an increase in stormwater runoff, higher peak discharges in channels, and the potential to cause erosion or sedimentation in drainage swales and streams. Increased runoff volumes and velocities could create nuisance flooding in areas without adequate drainage facilities or increase the pollutant load to storm drain systems.

With new development, drainage patterns would largely be maintained; new development would use the existing drainage facilities within the public right-of-way. Current runoff is captured and conveyed by existing storm drain infrastructure in the city and SOI.

According to Municipal Code Chapter 13.08, Storm Drainage Plan, the city is seriously affected by surface water and stormwater, and the continual subdivision and development of property in the city has placed a serious demand on existing facilities for the removal of surface water and stormwater, which poses a challenge to equitably apportioning the cost of development of such facilities. Therefore, the City Council determined that a drainage plan must be adopted and a drainage fee established to provide funds for the construction of facilities described in the drainage plan. The comprehensive storm drain plan number 2 prepared by the County flood control district; master plan revision number 1 prepared by L.D. King Engineering; the master plan of drainage facilities for the Terra Vista planned community; the Etiwanda area drainage plan; the Victoria planned community drainage plan; the Caryn planned community drainage plan; and construction costs, other related material, and all revisions or amendments subsequently adopted by the City Council by resolution were found to constitute the drainage plan for the city.

Standard flood control requirements for new development would minimize impacts of increased flows and volumes on downstream receiving waters. On-site storm drain systems would likely change with the individual project components but would still use the existing City and County facilities within the public right-of-way. Implementation of proposed land uses in future redevelopment areas would not result in substantial increases in surface water peak

flows or volumes over the existing conditions and would likely result in reduced discharges due to on-site water quality and LID features and BMPs. Implementation of the proposed land use changes in undeveloped areas would likely result in increased runoff, but discharges would be required to remain within the parameters defined by the most current Drainage Plan or sitespecific watershed study.

Moreover, Policy RC-2.3 calls for the retention and protection of natural stream courses from encroachment, erosion, and polluted urban runoff, which would reduce impacts to the stormwater system. Therefore, impacts would be less than significant. Additionally, all new development or significant redevelopment would be required to prepare a project-specific WQMP that would describe BMPs and site-design measures that would minimize stormwater runoff from the site.

Future development in the General Plan area would involve construction activities that could increase the potential for erosion and/or siltation. Standard erosion control measures would be implemented as part of the SWPPP for any proposed project to minimize the risk of erosion or sedimentation during construction. The SWPPP must include an erosion control plan that prescribes measures such as phased grading, limiting areas of disturbance, designating restricted-entry zones, diverting runoff from disturbed areas, protective measures for sensitive areas, outlet protection, and provisions for revegetation or mulching. The erosion control plan would also include treatment measures to trap sediment, including inlet protection, straw bale barriers, straw mulching, straw wattles, silt fencing, check dams, terracing, and siltation or sediment ponds.

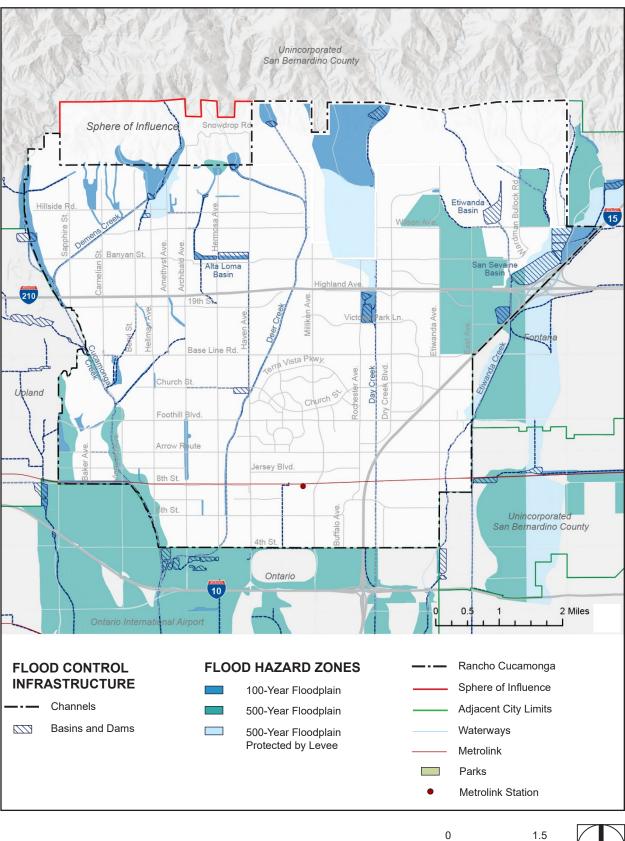
Though flood hazard zones cover approximately 3,857 acres of the city, other areas in the city may experience flooding during a heavy precipitation event. Figure 5.10-2, *FEMA Flood Hazard Zones*, shows the flood hazard zones in the city and SOI. Flooding hazards have the potential to impact a significant amount of the community, but less than 10 percent of this area is subject to a 100-year event. Municipal Code Chapter 19.12, Floodplain Management Regulations, was created to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to protect human life and health, minimize expenditure of public money for costly flood control projects, and minimize the need for rescue and relief efforts associated with flooding. Chapter 19.12 also provides provisions for flood hazard reduction, such as standards of construction, construction materials and methods, elevation, and floodproofing and standards for utilities, subdivisions, and manufactured homes.

Development within flood hazard areas would comply with flood protection standards that reduce vulnerability to flood impacts and ensure safe use and occupation of structures. Additionally, the proposed policies of the General Plan Update would reduce impacts to less than significant—such as Policy S-4.1, which prohibits the siting and construction of new essential public facilities within flood hazard zones; Policy S-4.2, which requires all new development to minimize flood risk with siting and design measures; Policy S-4.3, which promotes compliance of 100-year floodplain requirements on properties in the 500-year floodplain designation; Policy S-4.4, which requires new development to implement and enhance the Storm Drain Master Plan by constructing stormwater management infrastructure downstream from a proposed project; and Policy S-4.5 which requires

development within properties located adjacent or near flood zones to reduce or minimize run-off,.

With the implementation of applicable measures during the construction and operational phases of future development; the implementation of the General Plan Update policies, and federal, state, and local regulations, any erosion, siltation, polluted runoff, or flood hazard impacts would be less than significant.

Figure 5.10-2 - FEMA Flood Hazard Zones 5. Environmental Analysis



Source: Raimi + Associates, 2020; City of Rancho Cucamonga, 2020; SCAG, 2020; County of San Bernardino, 2020; FEMA, 2019 Scale (Miles)

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LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.10-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.10-3 would be less than significant.

Impact 5.10-4: The proposed project would not result in flood hazards associated with flood zones, tsunami, or seiche zones, or due to dam inundation. [Threshold HYD-4]

Flood Hazards

The General Plan Update includes several policies that ensure development minimizes potential flood impacts (Policies RC 2.1, RC-2.3, S-4.1 through S-4.5). As discussed in Impact 5.10-3, with the implementation of General Plan Update policies and federal, state, and local regulations, future development pursuant to the General Plan Update would not increase flood hazards associated with flood zones, and impacts would be less than significant.

Tsunami

The General Plan area is more than 30 miles northeast of the Pacific Ocean and is well outside of the tsunami inundation zone. No impacts would arise from tsunamis.

Seiches

Released water from a seiche would result in much smaller footprints than the dam inundation zones, and the probability of this occurring is extremely low. In the rare chance that a seiche does occur, the seiche would flow into the dam inundation zones, as illustrated in Figure 5.10-3, *Dam Inundation Zones*. Implementation of the General Plan Update policies and federal, state, and local regulations would ensure that future development pursuant to the General Plan Update would not result in flood hazards, and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.10-4 would be less than significant.

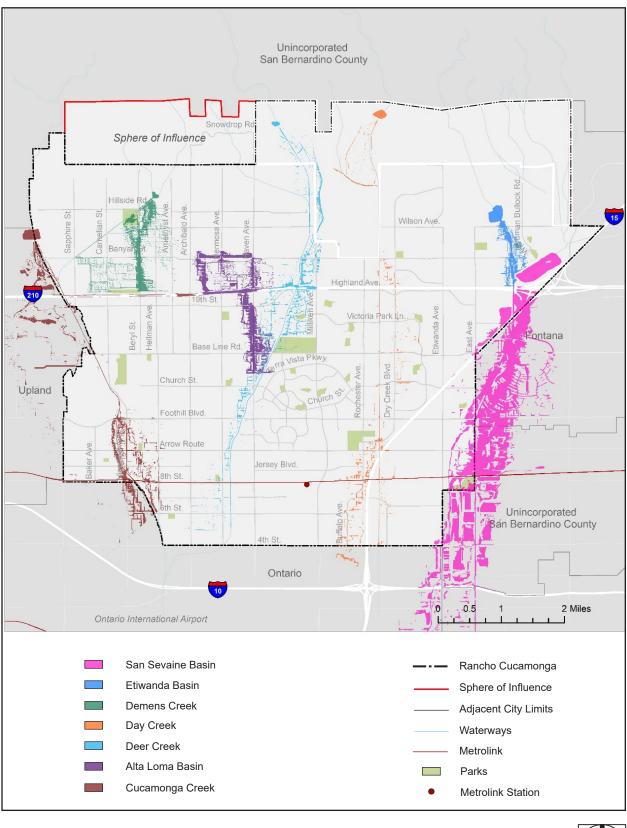
Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.10-4 would be less than significant.

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Figure 5.10-3 - Dam Inundation Zones 5. Environmental Analysis



Source: Raimi + Associates, 2020; City of Rancho Cucamonga, 2020; SCAG, 2020; County of San Bernardino, 2020; Department of Water Resources, 2020 1.5

Scale (Miles)

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Impact 5.10-5: Buildout of the General Plan would not obstruct or conflict with the implementation of a water quality control plan or sustainable groundwater management plan. [Threshold HYD-5]

The Chino Basin Water Bank Strategic Plan is designed to promote and implement waterstorage and recovery programs in the Chino Basin. Impact 5.10-1 details measures in place to ensure future development has a less than significant impact on surface and groundwater quality. These measures would also ensure that future development does not obstruct or conflict with the implementation of the UWMP. As discussed in Impact 5.10-2, the water supply would exceed the water demand, and buildout of the General Plan Update would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The project area is in adjudicated Chino Basin, established in 1978. The Sustainable Groundwater Management Act contains reporting requirements for adjucated basins. Because the proposed General Plan Update is within an adjucated basin and is consistent with the Chino Basin Water Bank Strategic Plan, which manages the basin, there would be no conflict with a sustainable groundwater management plan, and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.10-5 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.10-5 would be less than significant.

5.10.5 CUMULATIVE IMPACTS

Construction and operation of future projects under the General Plan Update could result in increased flows that would eventually discharge into waterways. Future projects would comply with their respective SWPPPs and regulations for water quality standards established by the UWMP and the City. Future projects both individually and cumulatively could potentially increase the volume of stormwater runoff and contribute to pollutant loading in the storm drain system with eventual discharge to waterways. Future projects would be required to comply with drainage and grading regulations and ordinances, such as with water quality requirements in the Statewide General Permit; the NPDES; the City of Rancho Cucamonga Municipal Code Chapter 19.12, Floodplain Management Regulations; and Chapter 19.20, Municipal Separate Storm Sewer System (MS4). New projects would also be required to comply with the City's standard conditions of approval, regulations, ordinances regarding water quality, and NPDES permitting requirements. As discussed previously, the 2020 UWMP projects a population of 236,573 in 2045, which exceeds the population project in the proposed General Plan Update. Further, the UWMP determined the supply would exceed demand in normal and multi-year drought scenarios from current to 2045. In consideration of preceding factors, the project's contribution to cumulative water impacts would be less than cumulatively considerable.

5.10.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.10.7 MITIGATION MEASURES

No mitigation measures are required.

5.10.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

5.10.9 REFERENCES

- Cucamonga Valley Water District. 2021. Cucamonga Valley Water District 2020 Urban Water Management Plan.
- Orange County. 2021. Santa Ana River Project 2021. Accessed May 28, 2021. https://ocip.ocpublicworks.com/service-areas/oc-infrastructure-programs/santa-anariver-project.
- Santa Ana Regional Water Quality Control Board (SARWQCB). 2016. Water Quality Control Plan for the Santa Ana River Basin.

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5.11 LAND USE AND PLANNING

This chapter evaluates the potential environmental effects related to land use and planning associated with implementation of the General Plan. The analysis includes a review of the updated General Plan for potential land use impacts and consistency with existing regional land use plans and policies.

Chapter Overview

Several proposed General Plan policies would improve connectivity and compatibility between existing and future development. A primary goal of the General Plan Update is to retain the city's current character, and several policies address consistency of new development with existing developments using materials, siting, and other design techniques. The General Plan Update includes policies and provisions that directly address land use encroachment of new development on existing neighborhoods and land uses; thus, no aspect of the proposed General Plan Update would divide the existing city. Additionally, the General Plan Update would require an update to the City's Municipal Code and Zoning Map, and possibly other development regulations to be consistent with the community vision. The population at buildout of the General Plan Update is the same as projections in the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the General Plan is consistent with the goals of the RTP/SCS and would further State goals through emphasis on design and reduction in vehicle miles traveled (VMT). None of the changes in the General Plan Update would affect plans, policies, or regulations of other agencies that have jurisdiction within the planning area. As individual projects are considered by the City, they would be subject to a variety of federal, State, and locally adopted plans designed to mitigate environmental impacts or to preserve important resources.

Heart of the Matter

The City of Rancho Cucamonga encompasses approximately 46 square miles and is over 90 percent built out. Of the developed areas, residential uses are the most common land use, accounting for approximately 55 percent of land in the city. The pattern of development within Rancho Cucamonga is generally characterized as residential uses dominating north of Foothill Boulevard, with pockets of residential uses south of Foothill Boulevard, predominantly west of Haven Avenue. Commercial centers are primarily clustered along Foothill Boulevard, Base Line Road, Haven Avenue, and Day Creek Boulevard. The southern portion of the city, east of Haven Avenue, is dominated by industrial uses. West of Haven Avenue is a mix of industrial and residential uses. The General Plan Update would help shape how the city looks and feels, while focusing on the design of places where people live. The proposed General Plan Update would allow pedestrians, cyclists, equestrians, and skateboarders the freedom of mobility choice, with buildings oriented to people, linked neighborhoods, and an expanded mobility network into neighborhoods most in need.

5.11.1 ENVIRONMENTAL SETTING

5.11.1.1 Regulatory Background

Regional

Southern California Association of Governments

SCAG is the Metropolitan Planning Organization (MPO) for six counties: San Bernardino, Orange, Riverside, Los Angeles, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates that SCAG research and prepare plans for transportation, growth management, hazardous waste management, and air quality. Additionally, SCAG reviews environmental documents of projects with regional significance for consistency with regional plans. Among the leading activities SCAG undertakes are:

- Maintain a continuous, comprehensive, and coordinated planning process (the "3 Cs") resulting in a Regional Transportation Plan (RTP) and a Federal Transportation Improvement Program (FTIP).
- Develop a Sustainable Communities Strategy (SCS) to address greenhouse gas (GHG) emissions as an element of the RTP.
- Develop demographic projections.
- Develop integrated land use, housing, employment, and transportation programs and strategies for the South Coast Air Quality Management Plan (AQMP).
- Serve as co-lead agency for air quality planning in the Central Coast and Southeast Desert Air Basin districts.
- Developing and ensuring that the RTP and the FTIP conform to the purposes of the State Implementation Plans for specific transportation-related criteria pollutants, per the Clean Air Act.
- Serve as the authorized regional agency for intergovernmental review of proposed programs for federal financial assistance and direct development activities.
- Review environmental impact reports for projects having regional significance to ensure they are in line with approved regional plans.
- Develop an area-wide waste treatment management plan.
- Prepare a Regional Housing Needs Assessment.
- Along with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council, prepare the Southern California Hazardous Waste Management Plan.

SCAG has developed the Southern California Regional Comprehensive Plan (RCP) as a planning framework for the development and implementation of guidelines applied to both the public and private sectors. The RCP functions as a voluntary "toolbox" to assist local jurisdictions in making their General and Specific Plans and individual projects more sustainable. As identified in Resolution No. 08-502-1 (Resolution of the Southern California Association of Governments Accepting the 2008 Regional Comprehensive Plan for the SCAG Region), given its advisory nature, the 2008 RCP is not used in SCAG's Inter-Governmental Review (IGR) process (SCAG 2008).

SCAG has developed a number of plans to achieve these regional objectives. The most applicable to the project is the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS).

2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

Federal guidelines require that all new regionally significant transportation projects be included in the RTP before they can receive federal or State funds or approvals. The RTP is a long-range transportation plan that provides a vision for regional transportation investments over a period of 20 years or more. Using growth forecasts and economic trends, the RTP considers the role of transportation in a more holistic light, including economic factors, environmental issues, and quality-of-life goals.

The San Bernardino County Transportation Authority (SBCTA) submits San Bernardino County transportation projects for inclusion in the RTP. The RTP must be updated and federally approved every four years. Federal approval requires a positive demonstration that the RTP projects will not generate travel emissions that exceed those assumed in the applicable AQMP; this requirement is known as "transportation conformity".

The 2016 RTP/SCS goals include the following: (1) improve regional economic development and competitiveness; (2) maximize mobility and accessibility in the region; (3) improve travel safety and reliability in the region; (4) preserve and ensure a sustainable regional transportation system; (5) maximize productivity of the transportation system; (6) improve air quality and encourage active transportation; (7) encourage and creative incentives for energy efficiency; (8) encourage land use and growth patterns that facilitate transit and active transportation; and (9) maximize the security of the regional transportation system.

Connect SoCal

On September 3, 2020, SCAG adopted the SoCal 2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that replaces the 2016-2040 RTP/SCS. Connect SoCal outlines more than \$638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Local Regulations

County

Local Agency Formation Commission for County of San Bernardino

The Local Agency Formation Commission (LAFCO) was created to discourage urban sprawl and encourage the orderly formation and development of local government agencies. There is a LAFCO in each county in California. One of the LAFCO's roles is its regulatory function. By law, any proposal to add land to a city or special district (annexation), create a new city or special district (incorporation or formation), remove land from a city or special district (detachment), consolidate, merge, or dissolve cities or special districts must be reviewed and approved by the LAFCO.

Local

The existing City of Rancho Cucamonga General Plan (General Plan) was adopted in 2010 and provides for the comprehensive planning of the future of the city. The singular purpose and goal of the General Plan is to implement the Rancho Cucamonga Vision. The General Plan accomplishes this through a series of policies and implementation actions, or programs related to more specific issues. These policies, in turn, are applied to both public and private development projects and decisions. The structure of the General Plan is organized around three dominant chapters that contain the policy direction for the city and three additional chapters that address resources, health and safety, and implementation.

Development Code

The implementation of the General Plan is generally managed by the Development Code (Title 17 of the Rancho Cucamonga Municipal Code). The Development Code includes zoning districts consistent with the General Plan and applies prescriptive development standards to each zoning district that guide the site layout and intensity. The Development Code also contains design standards for use types (residential, office, commercial, and industrial) that guide staff and the development community on the high-quality design aesthetics required within the city.

Specific Plans

Specific plans allow for flexibility in design and customized development standards tailored to specific needs and conditions. The Specific Plan is one of the most creative tools available for guiding and regulating development, but also requires considerable attention to detail and may be too involved for some situations. As specified by the California Government Code, a specific plan must be consistent with the General Plan and must respond to all the required General Plan topics to the extent that they apply to the area in question. The following are existing and proposed specific plans in the city.

- Empire Lakes Specific Plan (ELSP) (Also referred to as IASP Sub-Area 18 Specific Plan) 1994 adopted/2016 last revised
- Etiwanda North Specific Plan (NESP) 1992
- Etiwanda Specific Plan (ESP) 1985 adopted/2000 last revised
- Terra Vista Community Plan (TCVP) 1983 adopted/1995 last revised

Planned Communities

Planned Community zoning may be thought of as a less comprehensive form of a specific plan. It allows for custom design and development regulations, but its scope can be limited to only those aspects of the plan that deviate from conventional zoning requirements. It may include as many land use categories as are needed to implement the applicable General Plan designations. It is typically accompanied by thorough design guidelines to ensure a coherent, quality result as the Planning Area is built out. The following are planned communities in the city.

- Caryn Planned Community
- Etiwanda Highlands Planned Unit Development (EH) 1988

- Terra Vista Community Plan (TCVP) 1983 adopted/1995 last revised
- Victoria Community Plan (VCP) 1981

Master Plans

Master plans are discretionary planning entitlements (not a zoning district) that allow flexibility in the allowed uses and development standards for specific types of projects. Master plans are required for mixed-use projects and other integrated developments that warrant special development consideration beyond conventional zoning regulations to address the special or unique needs or characteristics. Master plans are also required for areas designated on the General Plan Land Use Map with the Master Plan symbol. The master plan entitlement requires preparation of a conceptual master plan to address issues such as circulation, drainage, open space linkages, trail connections, compatibility with adjacent uses, and similar concerns through a comprehensive approach and creative design flexibility. Master plans are intended to assure a harmonious relationship between the existing and proposed uses, and to coordinate and promote the community improvement efforts of private and public resources. Subsequent development within the master planned areas must be consistent with the approved conceptual master plans. The following are master plans in the city.

- Town Square Master Plan (TS) 2002
- Victoria Arbors Master Plan (VA) 2002

Overlays

Overlay districts establish unique use and/or development regulations for certain geographic areas of the city to address special site conditions, protect resources, and/or address land use needs opportunities in combination with the base zoning districts of the same parcels. Regulations for overlay zoning districts supplement the regulations that apply to the corresponding base zoning district. The following are overlay districts in the city.

- Foothill Boulevard Overlay District
- Senior Housing Overlay District
- Equestrian Overlay District
- Hillside Overlay District
- Haven Avenue Overlay District
- Industrial Commercial Overlay District

Standard Conditons of Approval

There are no standard conditions of approval that reduce land use and planning impacts.

5.11.1.2 Existing Conditions

As a City, Rancho Cucamonga is approaching the limits of its expansion ability. The city is bounded on three sides by the cities of Upland, Ontario, and Fontana on the west, south, and east, respectively. The foothills to the San Gabriel Mountains form the northern boundary. Because the City is committed to conservation of the foothills, and the existing jurisdictions form the other boundaries, annexation of land for future development is unlikely. The existing General Plan boundary is likely to remain unchanged. The existing General Plan provides for more intense development from Foothill Boulevard south to the city limits, with less intensive development north toward the mountains.

Land Use Types

The General Plan Update describes five basic land use types (also referred to as "place types"), including Neighborhoods, Corridors, Centers, Districts, and Open Spaces to define the existing and intended character, form, and function of each part of the city. The intent of the General Plan Update is to build on these place types and intenstify development where appropriate. Each place type, described below, is organized into designations that provide direction on the intended range of uses, appropriate levels of development density and intensity, and intended physical design character.

- Neighborhoods describe the places where most people live. They are predominantly residential and can include supporting amenities and services. Rancho Cucamonga includes the following five types of neighborhoods throughout the city:
 - Semi-Rural Neighborhood
 - Traditional Neighborhood
 - Suburban Neighborhood Very Low
 - Suburban Neighborhood Low
 - Suburban Neighborhood Moderate
 - Urban Neighborhood
- Corridors describe the places along major streets in the city that connect neighborhoods, centers, districts, and open spaces; enable smooth transitions between neighborhoods and districts; and provide a range of amenities, conveniences, transit access, and housing options on the edges of existing and future neighborhoods. Rancho Cucamonga includes the following three types of corridors throughout the city:
 - Neighborhood Corridor
 - City Corridor Moderate
 - City Corridor High
- **Centers** describe the places people go for shopping, dining, entertainment, and gathering as a community. Centers are nodes of activity throughout the city, providing retail and employment opportunities close to neighborhoods and, in some cases, also opportunities for new forms of housing within a short walk of those amenities and transit. Centers range in size and character to provide the desired services and activities of nearby residents. Rancho Cucamonga includes the following three types of center throughout the city:
 - Neighborhood Center
 - Traditional Town Center
 - City Center

- Districts describe the places where people work and conduct business. Districts are predominantly nonresidential with a primary activity that is functionally specialized, such as a commercial, office, or industrial use, and can also include some supportive commercial and recreational uses and housing. Rancho Cucamonga includes the following four types of districts throughout the city:
 - Office Employment District
 - 21st Century Employment District
 - Neo-Industrial Employment District
 - Industrial Employment District
- Open Spaces are the places people go to play, exercise, and learn, such as large recreational parks, natural conservation areas, and schools. Community playfields, Central Park and the conserved natural and rural open spaces of the foothills are large, specialized areas, whereas small- and medium-size parks, which provide places for informal play, family activities, and quiet recreation, are considered part of the neighborhood they serve. These different types of open spaces and recreational facilities together meet the full range of residents' needs for active and healthy lifestyles. Rancho Cucamonga includes the following three types of districts throughout the city:
 - Natural Open Space
 - Rural Open Space
 - General Open Space and Facilities

5.11.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- LU-1 Physically divide an established community.
- LU-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

5.11.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The Land Use and Community Character and the Mobility and Access elements contain numerous policies that address land use. The following policies are relevant to the thresholds of significance:

Land Use and Community Character

LC-1.3 Quality of Public Space. Require that new development incorporate the adjacent street and open space network into their design to soften the transition between private and public realm and creating a greener more human-scale experience.

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- LC-1.4 Connectivity and Mobility. Work to complete a network of pedestrian- and bike-friendly streets and trails, designed in concert with adjacent land uses, using the public realm to provide more access options.
- LC-1.5 Master Planning. When planning a site, there must be meaningful efforts to master plan the site so as to ensure a well-structured network and block pattern with sufficient access and connectivity to achieve the placemaking goals of this General Plan.
- LC-1.13 Improved Public Realm. Require that new development extend the "walkable public realm" into previously vacant and/or parking lot-dominant large single-use parcels of land.
- LC-4.2 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining residential or commercial development and provide for future connections into any adjoining vacant parcels.
- LC-4.3 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well-structured such that the physical layout, and land use mix promote walking to services, biking and transit use, and have the following characteristics.
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.
 - Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile.
 - Require development patterns such that 60 percent of dwelling units are within 1/2-mile walking distance to neighborhood goods and services.
 - Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context.
 - Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.6 Block Length. Require new neighborhoods to be designed with blocks no longer than 600 feet nor a perimeter exceeding 1,800 feet. Exceptions can be made if mid-block pedestrian and bicycle connections are provided, or if the neighborhood is on the edge of town and is intended to have a rural or semi-rural design character.
- LC-4.7 Intersection Density. Require new neighborhoods to provide high levels of intersection density. Neighborhood Center and Semi-Rural Neighborhoods should provide approximately 400 intersections per square mile. Suburban Neighborhoods should provide at least 200 intersections per square mile.

- LC-4.12 Neighborhood Edges. Encourage neighborhood edges along street corridors to be characterized by active frontages, whether single-family or multifamily residential, or by ground floor, neighborhood-service nonresidential uses. Where this is not possible due to existing development patterns or envisioned streetscape character, neighborhood edges shall be designed based on the following policies:
 - Strongly discourage the construction of new gated communities except in Semi-Rural Neighborhoods.
 - Allow the use of sound walls to buffer new Neighborhoods from existing sources of noise pollution such as railroads and limited access roadways.
 - Prohibit the use of sound walls to buffer residential areas from arterial or collector streets. Instead design approaches such as building setbacks, landscaping and other techniques shall be used.
 - In the case where sound walls might be acceptable, require pedestrian access points to improve access from the Neighborhoods to nearby commercial, educational, and recreational amenities, activity centers and transit stops.
 - Discourage the use of signs to distinguish one residential project from another. Strive for neighborhoods to blend seamlessly into one another. If provided, gateways should be landmarks and urban design focal points, not advertisements for home builders.
- LC-5.2 Connections Between Development projects. Require the continuation and connectivity of the street network between adjacent development projects and discourage the use of cul-de-sacs or other dead-end routes.
- LC-6.4 Access to Transit. Encourage the development of commercial and mixeduse centers that are located at and organized in relation to existing or planned transit stops, especially along Foothill Boulevard and Haven Avenue.
- LC-6.5 Walkable Environments. Centers should include very walkable and pedestrian-friendly streets with active building frontages along primary corridors and internal streets. In some cases, side access lanes may be inserted between existing major streets and building frontages, providing a low-speed environment that is very safe and comfortable for pedestrians and bicyclists, with pedestrian-oriented building frontages.

Mobility and Access

- MA-1.4Local Mobility Hub. Require new development at mobility hubs and key
stops along the future bus rapid transit and future transit circulator system
to facilitate first mile/last mile connectivity to neighborhoods.
- MA-2.3 Street Connectivity. Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.

- MA-2.4 Street Vacations. Prioritize pedestrian and utility connectivity over street vacations.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.

Resource Conservation

- **RC-1.1** View Corridors. Protect and preserve existing signature public views of the mountains and the valleys along roadways, open space corridors, and at other key locations.
- **RC-1.2 Orient toward View Corridors**. Encourage new development to orient views toward view corridors, valley and mountains.
- **RC-1.3 Transfer of Development Rights**. Allow the transfer of development rights from conservation areas to select development areas throughout the city and Sphere of Influence to protect hillsides, natural resources, and views and to avoid hazards and further the City's conservation goals.
- RC-1.4 Dark Sky. Limit light pollution from outdoor sources, especially in the rural, neighborhood, hillside, and open spaces to maintain darkness for night sky viewing.
- **RC-1.5 Transit Corridor Views**. Require that new development along major transit routes and travel corridors include 360-project design and landscape or design screening of outdoor activity, and storage, including views from the transit routes and travel corridors.
- **RC-1.6 Hillside Grading**. Grading of hillsides shall be minimized, following natural landform to the maximum extent possible. Retaining walls shall be discouraged and if necessary, screened from view.
- **RC-1.7 Preservation of Natural Land Features**. Preserve significant natural features and incorporate into all developments. Such features may include ridges, rock outcroppings, natural drainage courses, wetland and riparian areas, steep topography, important or landmark trees and views.
- **RC-6.1 Climate Action Plan**. Maintain and implement a Climate Action Plan (CAP) that provides best management practices for reducing greenhouse gas emissions.
- RC-6.5GHG Reduction Goal. Reduce emissions to 80 percent below 1990 levels by
2050 and achieve carbon neutrality by 2045.

RC-6.8 Reduce Vehicle Trips. Require Transportation Demand Management (TDM) strategies such as employer provided transit pass/parking credit, bicycle parking, bike lockers, high-speed communications infrastructure for telecommuting, and carpooling incentives, for large office, commercial, and industrial uses.

5.11.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.11-1: Project implementation would not divide an established community. [Threshold LU-1]

Division of an established community commonly occurs because of development and construction of physical features that constitute a barrier to easy and frequent travel between two or more constituent parts of a community. For example, a large freeway structure with few crossings could effectively split a community. In Rancho Cucamonga, the barriers can be an incomplete trail, cul-de-sac, or noise wall in an existing neighborhood that all but requires use of an automobile to get around.

The design direction for the General Plan is to improve access and mobility for existing and future residents by providing vehicular connections and non-motorized transportation options. The proposed General Plan includes Policy LC-1.4 that emphasizes connectivity and mobility, Policy LC-1.5 that requires master planning with a well-structured network and block pattern, and Policy LC-1.13 directing improvements to the public realm by extending walkable design into parking lots and along corridors. The land use pattern proposed in the General Plan increases building intensity in areas of the city that are already planned for commercial and high intensity development. These areas are accessed with major roadways and, as the proposed project is implemented, with additional transit and pedestrian pathways. The narrative of the proposed project indicates that connectivity is both a planning and an equity issue.

As noted above, several of the policies would improve not only connectivity but compatibility between existing and future development. A primary goal of the General Plan Update is to retain the city's current character, and several policies address consistency of new development with existing developments using materials, siting, and other design techniques.

No aspect of the proposed General Plan Update would divide the existing city. In addition, the updated General Plan includes provisions that directly address land use connectivity, compatibility, and encroachment of new development on existing neighborhoods and land uses. Thus, the General Plan update would result in no impact regarding division of an established community or land use compatibility issues.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: No Impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: No Impact.

Impact 5.11-2: Project implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]

Consistency with Regional Transportation Plan/Sustainable Community Strategy

The growth in population projected for the General Plan Update is not fully accounted for in the 2016-2040 SCAG growth forecasts because those forecasts were made before the sixth cycle regional housing needs assessment (RHNA) estimates, which resulted from a statewide housing crisis. The City's RHNA requires accommodation of over 10,000 housing units that could add over 30,000 new residents over an eight-year period. While this is unlikely given the historical growth pattern for the city, the potential remains, and that growth potential is considered inconsistent with the RTP/SCS forecast.

The 2040 population projection for Rancho Cucamonga in the RTP/SCS is 204,300, which is less than the projected population for planning period buildout of the General Plan Update of 233,088. Because the proposed General Plan may result in the city's population exceeding the 2040 population forecast for the city, this could be considered a conflict. However, the General Plan is both consistent with the goals of the RTP/SCS and would further State goals through emphasis on design and reduction in VMT, as discussed in Table 5.11-1. In addition, the RTP/SCS (RTP ID Number 200152) identifies a new interchange at the intersection of Arrow Route and I-15. The proposed General Plan would eliminate that connection; however, while the interchange would likely ease some congestion on I-15, traffic congestion is not considered an environmental effect. Further, adding roadway capacity could also encourage additional automobile use, which could increase VMT and associated impacts.

Table 5.11-1 SCAG 2016 RTP/SCS Goal Consistency Analysis

RTP/SCS Goal	Consistency Analysis
GI: Align the plan investments and policies with improving regional economic development andcompetitiveness.	Consistent. This RTP/SCS goal focuses on adopting policies and investments in regional infrastructure in support of improving regional economic development and competitiveness. For this reason, this goal is not directly applicable to any individual planning project such as the proposed General Plan Update. Nonetheless, the General Plan Update would not adversely affect the ability of SCAG to align plan investments and policies with economic development and competitiveness and would contribute towards achieving this goal by advancing the other RTP/SCS goals, as discussed below.
	Moreover, the Plan would further a compact development pattern by expanding land uses and intensity along transportation corridors where development is currently planned in the existing General Plan. This planning effort is compatible with the RTP/SCS goal of implementing regional infrastructure that supports sound regional economic development and competitiveness.

RTP/SCS Goal	Consistency Analysis
G2: Maximize mobility and accessibility for all people and goods in the region.	Consistent. The proposed vehicular, bicycle, and pedestrian circulation system defined in the Plan and described in Chapter 4, Mobility and Access, would be designed, developed, and maintained to meet localand regional transportation needs and would ensure efficient mobility and access. The Plan includes extension of roadways and emphasizes connectivity between existing and new neighborhoods for cars and for pedestrians.
G3: Ensure travel safety and reliabilityfor all people and goods in the region.	Consistent. Project implementation would ensure travel safety and reliability for people and goods by adding important links to the city's circulation system, as described above.
G4: Preserve and ensure a sustainable regional transportation system.	Consistent. The mix of uses permitted by the General Plan and the configuration would result in a reduction in VMT in comparison to the existing General Plan (See Table 5.17-5). By promoting reduced vehicle use, the Plan would decrease the traffic congestion, air pollution, and GHG emissions associated with growth in the region.
G5: Maximize the productivity of our transportation system.	Consistent. The proposed project emphasizes connectivity and access by requiring an internal circulation system thatwould provide convenient, safe, and efficient access and connections to planned residential and nonresidential land uses. It would also provide pedestrian and bicycle facilities that would facilitate access to existing transit service in the area.
G6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non- motorized transportation), such as bicycling and walking).	Consistent. The Plan would allow for the completion of the street network and create an extensive network of bicycle and pedestrian facilities that would encourage active nonmotorized transportation modes. The availability and use of alternative transportation systems would reduce air pollutant and GHG emissions from vehicle use and would promote an active lifestyle.
G7: Actively encourage and create incentives for energy efficiency, where possible.	Consistent. Section 5.6, <i>Energy</i> , of this Draft EIR discusses energy conservation and how the General Plan would avoid and reduce inefficient, wasteful, and unnecessary consumption of energy during construction and operation. As identified above, transportation fuel use would be reduced due to emphasis on providing a multimodal transportation network.
G8: Encourage land use and growth patterns that facilitate transit and active transportation.	Consistent. As discussed above, a primary characteristic of the General Plan is a focus on development in areas on existing, or planned, transit hubs. The land uses in these areas would be intensified and the design optimized to make use of transit availability and proximity to recreation, employment, and retail.
G9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Consistent. The Plan focuses new development along current and future transportation corridors rather than a distributed development pattern. The plan supports a variety of housing types including missing middle and higher density housing supported by connections to provide multi-modal access to supporting uses and job centers.

When the technical analysis for the proposed project was prepared, data from the Connect SoCal RTP/SCS was not integrated into the traffic model. Therefore, Table 5.11-2 EIR evaluates consistency with both the 2016 and the 2020 versions of the RTP/SCS.

Table 5.11-2 SCAG 2020 Connect SoCal Goal Consistency Analysis

Connect SoCal Goal	Consistency Analysis
Gl: Encourage regional economic prosperity and global competitiveness.	Consistent. The Plan identifies areas for job growth and establishes policies to support job creation to reduce the jobs/housing imbalance. Job growth is supported in the plan over a wide variety of employment types, contributing to regional economic prosperity.
G2: Improve mobility, accessibility, reliability and travel safety for people and goods.	Consistent. The proposed vehicular, bicycle, and pedestrian circulation system defined in the Plan and described in Chapter 4, Mobility and Access, would be designed, developed, and maintained to meet local and regional transportation needs and would ensure efficient mobility and access. The Plan includes extension of roadways and emphasizes connectivity between existing and new neighborhoods for cars and for pedestrians.
G3: Enhance the preservation, security and resilience of the regional transportation system.	Consistent. Project implementation would ensure travel safety and reliability for people and goods by adding important links to the city and regional circulation system, as described above.
G4: Increase person and goods movement and travel choices within the transportation system.	Consistent. The Plan emphasizes connectivity and access by requiring an internal circulation system that would provide convenient, safe, and efficient access and connections to planned residential and nonresidential land uses. It would also provide pedestrian and bicycle facilities that would facilitate access to existing transit service in the area.
G5: Reduce greenhouse gas emissions and improve air quality.	Consistent. The mix of uses permitted by the Plan would result in a reduction in VMT in comparison to the existing General Plan (See Table 5.175). By promoting reduced vehicle use, the Plan would decrease the traffic congestion, air pollution, and GHG emissions associated with growth in the region.
G6: Support healthy and equitable communities.	Consistent. The Plan would allow for the completion of the street network and create an extensive network of bicycle and pedestrian facilities that would encourage active nonmotorized transportation modes. The availability and use of alternative transportation systems would reduce air pollutant and GHG emissions from vehicle use and would promote an active lifestyle.
G7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent. The Plan includes the adoption of a Climate Action Plan to reduce GHG emissions in new development as well as further a compact development pattern by expanding land uses and intensity along current and future transportation corridors where development is currently planned in the existing General Plan.
G8: Leverage new transportation technologies and data- driven solutions that will result in more efficient travel.	Consistent. Goals in the Plan support the use of technology and data driven solutions to effectively manage travel patterns and support multi-modal transportation infrastructure to encourage efficient and safe people and goods movement.

C9: Encourage development of diverse	Consistent. The Safety Chapter of the General Plan includes policies that will maintain the hazards planning that is already part of the city's
housing types in areas that are supported by multiple transportation options.	operation and emphasizes regional cooperation with public safety personnel throughout the region.
G10: Promote conservation of natural	Consistent. The Plan focuses new development along current and future transportation corridors rather than a distributed development
and agricultural lands and restoration of habitats.	pattern. Areas in the north portion of city that are less developed are designated as open space with very low densities of development potential to preserve natural hillsides and contours. In addition, the plan allows for the transfer of development rights to preserve lands not conducive to development.

Consistency with City Land Use Plans and Regulations

The proposed General Plan will require an update the City's Municipal Code and Zoning Map, and will replace or amend specific plans and master plans previously adopted. The proposed project intends to simplify the development review process by having the General Plan Update and the zoning code be the source for development standards. As part of the development code update, the specific plans and master plans will be amended or repealed as shown in Table 5.11-2.

Table 5.11-2 Specific Plans and Master Plans Revised or Repealed with Zoni	ng Code
Update	

opuate	
Plan/Year Adopted or Amended	Notes on Review
Empire Lakes Specific Plan (ELSP) (Also referred to as IASP Sub-Area 18 Specific Plan) 1994 adopted/2016 last revised	Amend the ELSP boundary to cover area as required by the Development Agreement, with those regulations, requirements, and standards remaining in place. The remaining ELSP areas will be regulated by policy and standards in the General Plan Update. Areas regulated by the General Plan Update will be implemented with the citywide code (including new form-based districts, and design standards.
Etiwanda Highlands Planned Unit Development (EH) 1988	Repeal – Develop two new zone districts (e.g., VL- EH 9000 and VL- EH 14000) to regulate this area, consistent with the standards in the existing Planned Unit Development (PUD). Standards not regulated by the PUD would be regulated in the new zone districts. All other standards and procedures applicable to the VL District would apply to the VL-EH Districts.
Etiwanda North Specific Plan (NESP) 1992	Repeal – A portion of this Plan area was amended and now regulated by the Etiwanda Heights Specific Plan. The portion identified for low density residential can be regulated by the existing Low Residential District standards. The remaining area will be regulated by the Traditional Neighborhood Land Use Designation and subsequent zoning district and the zoning that replaces the Etiwanda Highlands Planned Unit Development (see above)
Etiwanda Specific Plan (ESP) 1985 adopted/2000 last revised	Repeal – A small area will be regulated by the new form-based zoning district based on General Plan placetype. Regulate the Very Low density area with the existing Very Low Residential District. Create new zone districts to regulate the remaining areas consistent with the standards in the Specific Plan.
Terra Vista Community Plan (TCVP) 1983 adopted/1995 last revised	Repeal – The Plan Area along Foothill Boulevard will be regulated by the new form-based zoning district based on the General Plan Update.
	The remaining area is a combination of Low Mediumz Medium, Medium High, and High zoning districts. Create new zone districts to regulate the remaining areas consistent with the standards in the TCVP.
Town Square Master Plan (TS) 2002	<i>Repeal</i> – This area to be regulated by policy and standards in the General Plan. Areas regulated by the General Plan will be implemented with the citywide code (including new form-based districts, and design standards (as applicable)).
Victoria Arbors Master Plan (VA) 2002	See VCP below. Victoria Arbors Master Plan overlaps with the VCP.
Victoria Community Plan (VCP) 1981	<i>Repeal</i> – A portion will be regulated by the applicable new form- based zoning district based on General Plan placetype. For the remainder, the existing Low and Low Medium Residential zoning districts will be applied based on the designation in the VCP. The Mixed Use overlay will also be deleted as part of this effort.

When an existing Plan is recommended to be repealed and replaced with existing districts or new districts, all citywide regulations that apply to that district, including citywide design regulations, would apply. Any area specific design standards would be repealed and incorporated into the development code or objective design standards. If there are inconsistencies between the existing plans and what exists as buildings today, the code will include procedures for flexibility in the development standards.

The City is responsible for ensuring that zoning changes occur shortly after adoption of the General Plan. For much of the city, the changes to zoning will result in little to no modification to the existing table of land uses and/or development standards. In others, both the allowable land uses and the expected density and intensity of development will be increased to allow greater development potential in the focus areas. The impacts of that increase are analyzed in this EIR.

Following the amendments to the zoning code, if zoning and General Plan land use designations are not identical, General Plan policies would be consulted for guidance in amending the Zoning Ordinance for consistency with the updated General Plan during consideration of any development project. The update to the zoning code will follow this project and bring the code into consistency with the General Plan and will tier from this EIR. Once the code is amended, there will be no inconsistency between the General Plan and the zoning code.

Municipal Code: Tree Preservation Regulations

Section 17.80, Tree Preservation, of the Rancho Cucamonga Municipal Code protects trees that are community resources from indiscriminate cutting or removal. The ordinance establishes procedures for the removal and replacement of trees. The proposed General Plan continues to support this ordinance.

None of the changes in the General Plan Update would affect plans, policies, or regulations of other agencies that have jurisdiction within the planning area. Most of the design of the General Plan Update is intended to address state and global issues related to climate change and reduce vehicle miles travelled. As individual projects are considered by the City, those proposed projects would be subject to a variety of federal, State, and locally adopted plans designed to mitigate environmental impacts or to preserve important resources. Plans and policies related to specific resource issues are addressed in those specific sections of this EIR. No conflicts between the specific resources and a policy or regulation of another agency would occur because of the proposed project. Therefore, impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.11-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.11-2 would be less than significant.

5.11.5 CUMULATIVE IMPACTS

The cumulative setting includes the entire Inland Empire with all the associated cities and counties. Land uses within the area are regulated by individual agencies through their respective adopted general plans and development ordinances. Jurisdictional boundaries limit implementation of regional mitigation by any one city or county, and therefore, coordination of development for road connectivity and adjacent development is important.

Future land and transportation development associated with the proposed General Plan includes homes, residents, employment, industry, high speed rail, and connectivity to important transportation and employment centers in the region. This EIR evaluates projected development, along with future development in surrounding municipalities, which will result in impacts to the region. The overarching impact is one of traffic and the indirect impacts associated with more vehicles on the roadway. As the region grows, the increase in traffic will result in more noise, air pollution, and greenhouse gas emissions. All the cities and counties of the Inland Empire are required to address these issues in their respective general plans and development procedures. The proposed project reduces VMT through the intensification of land uses in focus areas near transit opportunities.

In addition, all of the cities and the counties coordinate regional planning through participation with SCAG and the San Bernardino County Transportation Agency (SBCTA), who prepare a regional transportation plan (RTP) and sustainable communities strategy (SCS). The City will work with SBCTA to update the current RTP/SCS on the four-year cycle. While implementation of the General Plan Update would increase the development intensity in the city and the region, it would not combine with other development in the region to physically divide a community or result in inconsistencies with plans adopted to avoid or mitigate an environmental effect. Therefore, the General Plan Update's contribution to a cumulative effect would be less than considerable.

5.11.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, impacts related to land use would be less than significant.

5.11.7 MITIGATION MEASURES

No mitigation measures are required.

5.11.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.11.9 REFERENCES

Southern California Association of Governments (SCAG). 2020, May 7, 20120–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). https://www.connectsocal.org/Documents/Adopted/fConnectSoCal-Plan.pdf This page intentionally left blank.

5.12 MINERAL RESOURCES

This section discusses mineral resources in the City of Rancho Cucamonga based on a review of published reports regarding the local presence of oil, gas, geothermal, and aggregate (sand and gravel) resources within the city limits. Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes or organic substances. Minable minerals or an "ore deposit" is defined as a deposit of ore or mineral having a value materially more than the cost of developing, mining, and processing the mineral and reclaiming the project area.

Chapter Overview

Future development and redevelopment within the city would require sand and gravel resources for roadways, infrastructure, and building construction. These resources would be derived from local sources in the city or other nearby areas. The extraction of aggregate resources impacts the surrounding environment and can adversely impact adjacent planned land uses in terms of noise, dust, traffic, and aesthetics; thus, land uses near ongoing or planned resource extraction areas must be carefully considered to minimize potential conflicts. However, the designated aggregate resource sectors in Rancho Cucamonga are at the northern end of the city, where limited urban development is present. Most of these areas are planned for Open Space, Conservation, Flood Control/Utility Corridor, or Hillside Residential that allows low density developments.

This chapter concludes that implementation of the General Plan Update would not impact aggregate mineral resources in the city and would not result in the potential loss of availability of local resources due to future development. Additional sand and gravel mining sites near the city boundary, including the Holliday Rock Campus Plant and the Kaiser Fontana Mine, would not be impacted by any future development and would also help to provide the required resources. However, future development under the General Plan Update would contribute to the loss of additional mineral resources due to buildout of the city, which would be a cumulatively significant impact.

Heart of the Matter

Conservation is at the crossroads of stewardship and equity. The General Plan Update combines conservation of land with consideration of the natural resources that affect the surrounding environment. Modern construction is efficient at moving soil and building on flat surfaces. However, construction removes geographic features and elements of the landscape that have served as landmarks for generations. The General Update Plan requires that grading in hillside or slope areas result in a natural-appearing form, which would reduce the need for substantial mineral resources for construction.

5.12.1 ENVIRONMENTAL SETTING

5.12.1.1 Regulatory Background

State Regulations

Surface Mining and Reclamation Act

California's Surface Mining and Reclamation Act of 1975, referred to as SMARA, was enacted to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. Requirements for SMARA are codified under PRC §§ 2710 et seq. Under state law, all mining operations are required to obtain permits prior to commencing operations and abide by local and state operating requirements. Mining operations are also required to have appropriate reclamation plans in place, provide financial assurances, and abide by state and local environmental laws.

Classification

The California Geological Survey's (CGS) Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources per SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their General Plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves the determination of Production-Consumption (P-C) Region boundaries, based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only those portions of the region that are urbanized or urbanizing and are classified for their aggregate content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. The classification of these mineral resources is a joint effort of the state and the local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones (MRZ), Scientific Resource Zones (SZ), or Identified Resource Areas (IRA), described below.

- **MRZ-1:** A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.

- MRZ-3: A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- MRZ-4: A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- **SZ Areas:** Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- **IRA Areas:** County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.

As part of the classification process, an analysis of site-specific conditions is utilized to calculate the total volume of aggregates within individually identified Resource Sectors. Resource Sectors are MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C Regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified within the P-C Region.

Designation

Once a classification report has been completed, the State Mining and Geology Board may choose, based on recommendations from the State Geologist, to proceed with the second step in SMARA's mineral land identification process, designation of those mineral deposits that are of regional or statewide significance. In contrast to classifications, which inventory mineral deposits without regard to land use or land ownership, the purpose of a designation is to identify deposits that are potentially available from a land-use perspective and are of prime importance in meeting future needs of the region or state.

Standard Conditions of Approval

There are no standard conditions of approval that reduce mineral resource impacts.

5.12.1.2 Existing Conditions

Mineral resources are naturally occurring chemicals, elements, or compounds formed by inorganic processes or organic substances. These resources include bituminous rock, gold, sand, gravel, clay, crushed stone, limestone, diatomite, salt, borate, potash, geothermal, petroleum, and natural gas resources. Construction aggregate, another mineral resource, refers to sand and gravel (natural aggregates) and crushed stone (rock) that are used as Portland cement-concrete (PCC) aggregate, asphaltic-concrete aggregate, road base, railroad ballast, riprap, fill, and the production of other construction materials.

There are four coalescing alluvial fans in or near the city, comprising a significant local sand and gravel resource. From west to east, these alluvial fans are known as the Lytle Creek (San Sevaine Wash and Etiwanda Creek), San Antonio, Cucamonga, Deer Creek, and Day Creek fans. These alluvial fans generally start at the canyons at the base of the San Gabriel Mountains, north of the city. While the northern ends of these fans remain undeveloped, the creeks have been channelized in and near the city and in developed areas along the creek (SMGB 1987). To organize the classification of aggregate resources, the State utilizes the concept of "sectors" to identify areas that meet eligibility guidelines for designation of regional or statewide significance. Five sectors (C-1, C-2, D-1, D-3, and D-16) are in the Claremont-Upland Production-Consumption Region. Two Sectors (A-4 and A-7) are in the San Bernardino Production-Consumption Region, see Figure 5.12-1, *Aggregate Resource Sectors*.

The CGS Mineral Resources Project has been tasked with mapping and classifying mineral resources in California pursuant to SMARA. The areas covered by this map have been primarily assigned a "MRZ-2" mineral classification and Urban Area, as shown in Figure 5.12-2, *Mineral Land Classification*. The Mineral Land Classification for the area shows that the areas along the washes and creeks are designated MRZ-2, where significant mineral deposits are present. According to the CGS, this designation signifies areas where geologic data indicate that significant PCC-grade aggregate resources are present (CGS 2007).

Based on the Mineral Land Classification prepared by the California Department of Conservation, the city is mainly within the Claremont-Upland Production-Consumption region, where regionally significant mineral resources have been identified along Day Creek, Deer Creek, Cucamonga Creek, and San Antonio Wash. The northeastern edge of the city is in the San Bernardino Production-Consumption region, where regionally significant mineral resources have been identified along Lytle Creek and the San Sevaine Wash near the city (SMGB 1987).

Based on the California Department of Conservation maps, there are no oil, gas, or geothermal resources in Rancho Cucamonga or the surrounding area (DOC 2001). There is one plugged and abandoned dry hole near the intersection of Spruce Avenue and Elm Avenue. The closest exploratory well to the city is 1.2 miles south and has a current status of "idle." No other exploratory oil wells are present in or near the city (DOC 2021a).

Within the city, approximately 1,119 acres are classified as containing aggregate resources, and the SOI has 1,411 acres containing aggregate resources (Rancho Cucamonga 2010). As of 2021, there were no active mining operations in Rancho Cucamonga. A sand-and-gravel mining operation is in the northern portion of city but is closed with no intent to resume. Additionally, there are two mining sites within 1.5 miles of the city. The Holliday Rock Campus Plant operates along Cucamonga Creek, just west of the city limits, and primarily produces sand and gravel. The Kaiser Fontana Mine is south of the city limits and primarily produces sand and gravel (DOC 2021b).

5.12.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- M-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- M-2 Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

5.12.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.12-1: Project implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. [Threshold M-1 and M-2]

Sand and gravel are necessary ingredients for urban construction, and builders often rely on local sources for these materials to control construction costs. However, aggregate extraction impacts the surrounding environment and can adversely impact adjacent planned land uses in terms of noise, dust, traffic, and aesthetics. Consequently, land uses near ongoing or planned resource extraction areas must be carefully considered to minimize potential conflicts.

Regionally Important Mineral Resources

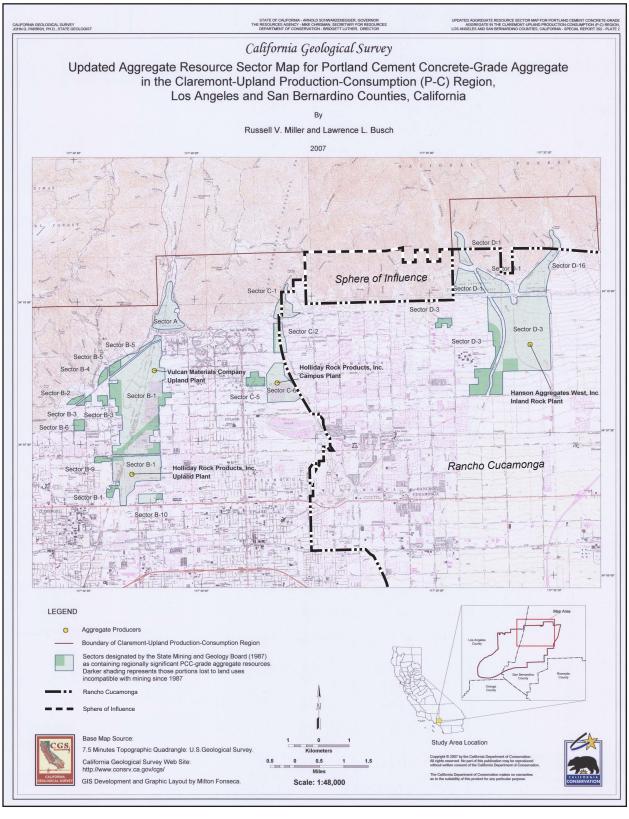
The designated aggregate resource sectors are at the northern end of the city, where limited urban development is present. The majority of these areas are planned for Open Space, Conservation, Flood Control/Utility Corridor, or Hillside Residential that allows low density development.

The resource area along Deer Canyon and Deer Creek (Sectors D-1 and D-3) is designated Flood Control/Utility Corridor and will continue to provide future access to underlying aggregate resources. According to the proposed land use plan, the north sections of the Deer Creek and Day Creek Channel are planned for moderate change over the next 15 to 20 years, at Etiwanda Heights Town Center, to become a traditional neighborhood, and additional sectors would retain Open Space use and Flood Control/Utility Corridor designations to maintain access to underlying mineral resources. Future residential uses near this area would preclude mining operations on the residential site and adjacent areas. Additionally, the Etiwanda Heights Town Center development area contains a closed sand and gravel mining operation that has no intent to resume.

In 2017, State Geologist released an updated designation report for the termination of mineral resource designation for 18 areas in 11 sectors due to the presence of adjacent incompatible land use developments, such as housing, a new freeway, and a flood-control channel; therefore, these areas are no longer considered mineral resource areas. It is estimated that 4,440 acres were lost because of their designation status being terminated, reflecting a loss of 959 million tons of aggregate. Among these are C-2 on the Upper Cucamonga Fan and portions of D-3 on the Deer Creek Fan. Although 2 new sectors were proposed for designation in the San Bernardino Production-Consumption region, another 57 areas in 8 sectors were processed for termination.

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Figure 5.12-1 - Aggregate Resource Sectors 5. Environmental Analysis



Source: 7.5 Minutes Series Topographic Quadrangle USGS, 2007; Department of Conservation, Division of Oil, Gas, and Geothermal Resources Urban Area: GDT April, 2004



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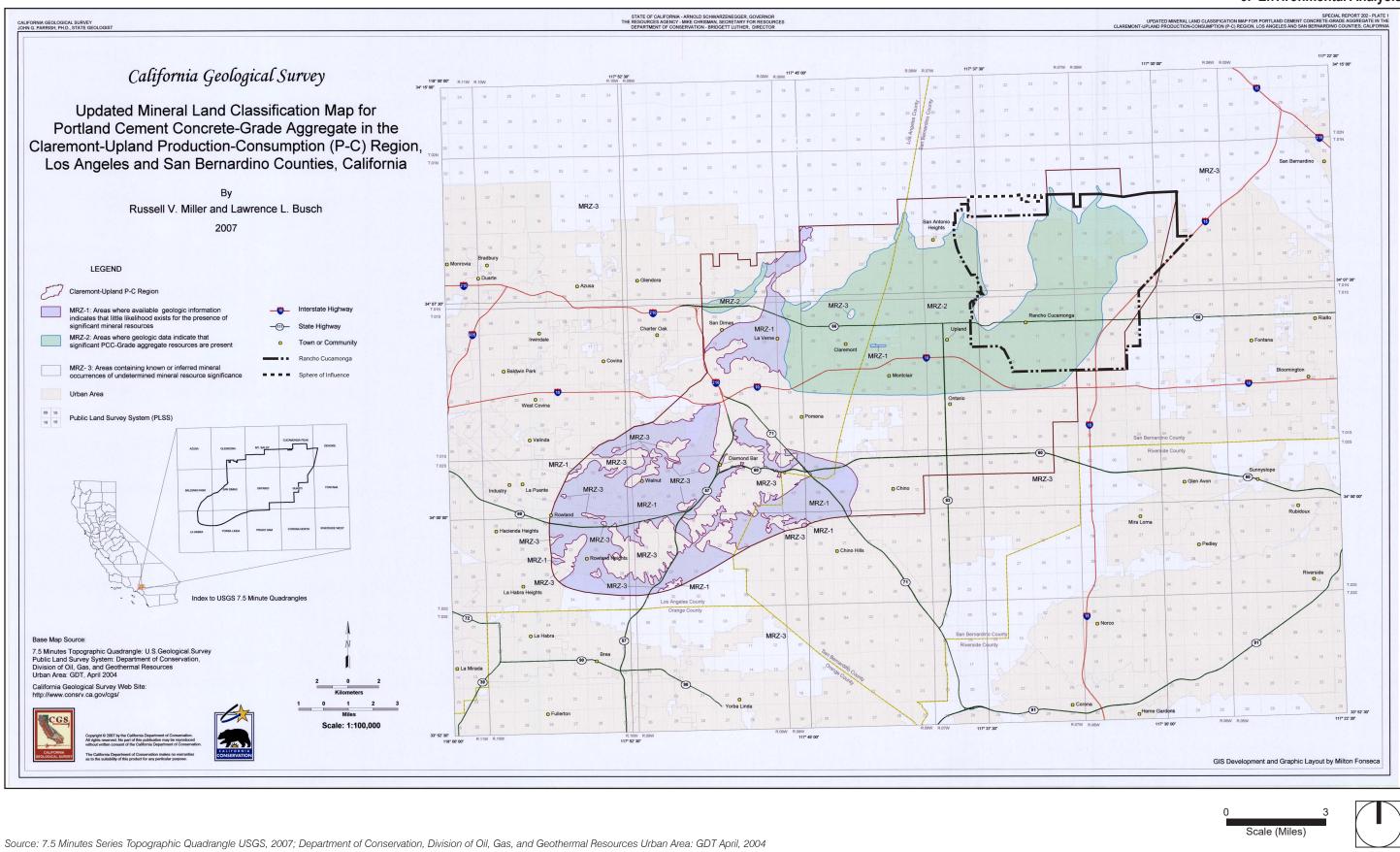


Figure 5.12-2 - Mineral Land Classification 5. Environmental Analysis

PlaceWorks

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These included portions of A-4 and A-7 along the San Sevaine Wash (SMGB 2017). The resource area along San Sevaine Wash (Sectors A-4 and A-7) is designated as Flood Control/Utility Corridor and is primarily open space. Though there are aggregate mineral resources in the city, no mine is currently operating within the City or SOI boundaries, and the existing resources would not be considered regionally significant. Therefore, there would be no impact. No mitigation is required.

Locally Important Mineral Resources

Construction of future development and redevelopment in the city would require sand and gravel resources for roadways, infrastructure, and building construction. These resources would be derived from local sources in the city or other nearby areas. The city contains approximately 1,119 acres classified as containing aggregate resources, and 1,411 acres containing aggregate resources are in the SOI (Rancho Cucamonga 2010). Since the city does not have any active mining operations, resource demand would have to met from other available resources in the region. There are additional sand and gravel mining sites within 1.5 miles of Rancho Cucamonga, including the Holliday Rock Campus Plant and the Kaiser Fontana Mine. These mining operations would not be impacted by the proposed project and would also help to provide the required resources. Thus, there would be no impact due to the potential loss of availability of these local resources due to future development; no mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.12-1 would have no impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.12-1 would have no impact.

5.12.4 CUMULATIVE IMPACTS

The cumulative impacts on mineral resources are evaluated based on the potential impacts of past and future development in the City of Rancho Cucamonga, the SOI, and the Claremont-Upland and San Bernardino Production-Consumption Regions.

The State Mining and Geology Board recognizes that urban development has precluded access to most known resources through development (including construction of roadways and infrastructure) on or adjacent to the resource areas. The recent termination of resource designations in sectors of the Claremont-Upland Production-Consumption Region, discussed previously, is evidence of continuing urban encroachment into designated mineral resource areas. The designated sectors will primarily remain open space. The D-3 sector is expected to see moderate change over 15 to 20 years as it develops a traditional neighborhood at the Etiwanda Heights Town Center, which would remove access to its mineral resources in the future.

Future development and redevelopment under the General Plan Update would contribute to cumulative demand for construction aggregates in the region. Most of the production-consumption regions in the state do not have sufficient supplies to meet their projected 50-year demand. CGS estimates that the Claremont-Upland Production-Consumption Region has a 50-year demand for aggregate resources in the amount of 300 million tons. However, only 147 million tons of permitted aggregate resources are available. For the San Bernardino Production-Consumption Region, the 50-year demand for aggregate resources. Thus, existing permitted resources cannot meet anticipated demands to the year 2056 in both regions (CGS 2018).

The surrounding cities contain mining operations, two of which are located within 1.5 miles of the City boundary. The proposed project would increase the demand for aggregate resources, but the CGS already estimates that the demand for these resources is greater than the supply. Therefore, the loss of additional mineral resources due to buildout of the city, although not locally significant, would contribute to a cumulatively significant impact related to the loss of known mineral resources. This impact would be significant and unavoidable.

5.12.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, project-specific impacts would be less than significant, but the General Plan Update's contribution to cumulative impacts would be considerable.

5.12.6 MITIGATION MEASURES

No mitigation measures are available to reduce the General Plan Update's contribution to cumulative impacts on minerals.

5.12.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

5.12.8 REFERENCES

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5.13 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the City of Rancho Cucamonga General Plan Update to result in noise impacts in the city and sphere of influence (SOI).

The analysis in this section is based in part on the following technical reports:

- Noise and Vibration Existing Conditions: Draft Report, Ascent Environmental, May 2020
- Noise and Vibration Technical Memorandum, Ascent Environmental, June 2021

Chapter Overview

This chapter concludes that implementation of the General Plan Update would result in significant temporary and permanent increases of noise levels throughout the city from construction activities and land use development projects.

Construction noise can be characterized based on the type of equipment needed and activity, such as site preparation/foundation work, utility improvements, roadway improvements, and vertical construction. Future development under the General Plan Update would occur over an approximately 20-year period until 2040 and would generate temporary noise level increases on and adjacent to individual construction sites. Demolition and construction activity would, in some cases, occur near existing residences and other noise-sensitive receptors and extend over the course of several weeks to months, or even longer depending on the individual development type and other project- and location-specific circumstances.

In addition, land use development that results in traffic increases could also result in long-term traffic noise increases (or decreases) on roadways and freeways in the city. New development and associated traffic noise increases could result in exposure of existing receptors or future planned development to substantial permanent noise increases. Noise compatibility standards vary based on the land use type; thus, depending on the land use type and proximity to existing major freeways/roadways, traffic noise increases could expose existing development to substantial traffic noise levels that exceed applicable noise standards. Implementation of the General Plan Update would include regulations designed to protect new sensitive land uses from excessive noise levels.

Heart of the Matter

Noise levels in the City of Rancho Cucamonga will increase as more people move in and live their lives. There will be more children laughing, more music playing, and more people singing along. There will also be more garbage trucks, street sweeping, trains, leaf blowers, and car alarms. Noise becomes an issue when it regularly disturbs sleep, discourages the enjoyment of the outdoors, and affects the daily routine of people.

As the city develops, the combination of demolition and new construction will add to the background noise and vibration of the city. While normal, this can be unsettling to those who already live here. While some of the noise can be managed by limiting when and where construction can occur, not all of it can be contained. Additionally, the increase in population

would result in increased transportation noise throughout the city from cars, trucks, and trains, which generate noise that affect those who live close by and can often be heard by people who live far from the source. Regulations can only go so far in reducing noise levels; the rest is understanding that life in a city is noisy, and provided we still have quiet spaces to sleep and relax, we should embrace the good noise.

5.13.1 ENVIRONMENTAL SETTING

5.13.1.1 Regulatory Background

This section provides a summary of federal, state, and local regulations, ordinances, plans, and policies that are related to noise and vibration in Rancho Cucamonga. Also provided is a summary of noise guidance from the state's General Plan Guidelines.

Federal Regulations

US Environmental Protection Agency Office of Noise Abatement and Control

The US Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to be valuable in the analysis of noise effects.

Federal Transit Administration

To address the human response to ground vibration, FTA has guidelines for maximum acceptable vibration criteria for different types of land uses. These guidelines are presented in Table 5.13-1.

Table 5.13-1 Groundborne Vibration Impac	t Criteria for Gen	eral Assessmer	זנ			
		3V Impact Leve 1 micro-inch/s				
Land Use Category	Frequent Events ¹	-				
<i>Category 1:</i> Buildings where vibration would interfere with interior operations.	65 ⁴	65 ⁴	65 ⁴			
Category 2: Residences and buildings where	72	75	80			

72

75

nt

80

83

75

78

Table 5.13-1 Groundborne Vibration Impact Criteria for General Assessment

Source: Ascent 2020.

daytime uses.

people normally sleep.

Notes: VdB = vibration decibels referenced to 1 μ inch/second and based on the root mean square (RMS) velocity amplitude. GBV = Groundborne Vibration

¹ "Frequent Events" is defined as more than 70 vibration events of the same source per day.

² "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

³ "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

⁴ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels.

Category 3: Institutional land uses with primarily

State Regulations

California Department of Transportation

In 2013, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2013). The manual provides general guidance on vibration issues associated with construction and operation of projects in relation to human perception and structural damage. Caltrans recommendations for vibration levels that could result in damage to structures exposed to continuous vibration are presented in Table 5-13-2.

PPV (in/sec)	Effect on Buildings
0.4–0.6	Architectural damage and possible minor structural damage
0.2	Risk of architectural damage to normal dwelling houses
0.1	Virtually no risk of architectural damage to normal buildings
0.08	Recommended upper limit of vibration to which ruins and ancient monuments should be subjected
0.006–0.019	Vibration unlikely to cause damage of any type

Source: Ascent 2021.

Notes: PPV= Peak Particle Velocity; in/sec = inches per second

Local

City of Rancho Cucamonga Exterior Noise Standards

Section 17.66.050(C) of the City of Rancho Cucamonga's municipal code regulates exterior noise levels. The noise ordinance provides Noise Standards relative to community noise level exposure, guidelines, and regulations. It is deemed unlawful to exceed the following exterior noise levels at any location within the city as shown below:

- Basic noise level for a cumulative period of not more than 15 minutes in any one hour; or
- Basic noise level plus five dBA for a cumulative period of not more than ten minutes in any one hour; or
- Basic noise level plus 14 dBA for a cumulative period of not more than five minutes in any one hour; or
- Basic noise level plus 15 dBA at any time.

City of Rancho Cucamonga Residential Noise Standards

Pursuant to Municipal Code Section 17.66.050(F), exterior noise levels should not exceed 65 dBA between the hours of 7:00 am and 10:00 pm at residential uses (Table 5.13-3). These are the noise limits when measured at the adjacent residential property line (exterior) or within a neighboring home (interior).

Location of	Maximum Allowable				
Measurement	10:00 p.m. to 7:00 a.m.	7:00 a.m. to 10:00 p.m.			
Exterior	60 dBA	65 dBA			
Interior	45 dBA	50 dBA			

Table 5.13-3 Residential Noise Limits

Source: Rancho Cucamonga Municipal Code §17.66.050(F). Notes:

(A) It shall be unlawful for any person at any location within the city to create any noise or to allow the creation of any noise which causes the noise level when measured within any other fully enclosed (windows and doors shut) residential dwelling unit to exceed the interior noise standard in the manner described herein.

(B) If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be determined, each of the noise limits above shall be reduced five dBA for noise consisting of impulse or simple tone noise.

City of Rancho Cucamonga Commercial Noise Standards

The City of Rancho Cucamonga has adopted noise standards for commercial and office uses, pursuant to Municipal Code Section 17.66.050(G). All commercial operations and businesses shall be conducted to comply with the following standards:

- General: Commercial and office activities shall not create any noise that would exceed an exterior noise level of 65 dBA during the hours of 10:00 p.m. to 7:00 a.m. and 70 dBA during the hours of 7:00 a.m. to 10:00 p.m. when measured at the adjacent property line.
- Loading and unloading: No person shall cause the loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10:00 p.m. and 7:00 a.m., in a manner which would cause a noise disturbance to a residential area.
- Vehicle repairs and testing: No person shall cause or permit the repairing, rebuilding, modifying, or testing of any motor vehicle, motorcycle, or motorboat in such a manner as to increase a noise disturbance between the hours of 10:00 p.m. and 8:00 a.m. adjacent to a residential area.

Standard Conditions of Approval

5.13-1: For construction activities that do not involve pile driving occurring within 580 feet residential, schools, churches, or similar uses or within 330 feet of commercial/industrial uses or for construction activities involving pile driving occurring within 1,000 feet of residential, schools, churches, or similar uses, or within 330 feet of commercial/industrial uses, or nighttime construction activities, as defined in Development Code Section 17.66.050), the City shall require that project applicants prepare a site-specific construction noise analysis demonstrating compliance with the noise standards of Development Code Section 17.66.050, as determined by the City. The analysis shall be completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, restrictions on construction timing to avoid nighttime hours, restrictions on the location of equipment and vehicle use within the construction site, installing noise mufflers on construction equipment, use of electric-powered vehicles and

equipment, use of sound blankets on construction equipment, and the use of temporary walls or noise barriers to block and deflect noise.

- **5.13-2:** To avoid or substantially lessen exposure to substantial permanent increases in traffic noise, the City shall, at the time of development application submittal, require the preparation of a traffic noise study that includes (1) the evaluation of potential traffic noise impacts of new noise sources (e.g., project-generated traffic noise increases) on nearby existing noise sensitive receptors (such as residential neighborhoods) and (2) require noise reduction measures (e.g., sound walls, rubberized asphalt) to prevent exposure of noise sensitive receptors to substantial noise increases, consistent with Table N-1 and incremental increase standards of no greater than 3 dB where existing levels are below 65 dBA CNEL, 1 dB where existing levels are between 70 dBA CNEL and 75 dBA and any increase where existing levels are above 75 dBA CNEL, as determined by the City.
- 5.13-3: The City shall require that project applicants analyze and mitigate potential noise impacts from new stationary noise sources (e.g., loading docks at commercial and industrial uses, mechanical equipment associated with all building types), to, as determined by the City, comply with the City's daytime (7:00 a.m. to 10:00 p.m.) standards of 65 dBA L_{eq}/50 dBA L_{eq} (exterior/interior) and nighttime (10:00 p.m.-7:00 a.m.) standards of 60 dBA L_{eq}/45 dBA L_{eq} (exterior/interior), described in Development Code Section 17.66.050(F). The analysis shall be prepared by a qualified acoustical engineer or noise specialist and completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, the use of enclosures or screening materials (e.g., landscape buffers, parapets, masonry walls) around stationary noise sources (e.g., heating, ventilation, and air conditioning systems, generators, heating boilers, loading docks) or of noise suppression devices (e.g., acoustic louvers, mufflers).
- **5.13-4a:** The City shall, at the time of development project application submittal, evaluate the compatibility of proposed noise sensitive uses (e.g., residences, lodging, schools, parks) with the noise environment to ensure noise compatibility standards (Table N-1) are met.
- 5.13-4b: Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, prioritize site planning that reduces noise exposure over other attenuation measures, particularly the location of parking, ingress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.
- **5.13-4c:** Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, incorporate building orientation, design, and interior layout into the project to achieve compatible noise levels. For example, noise insulation materials (e.g., double-glazed windows and well-sealed doors) substantially lessen interior noise levels. In addition, interior building layouts that place active rooms, such as kitchens, between noise-sensitive rooms, such as bedrooms, and exterior noise

sources, such as roadways, substantially lessen interior noise levels within the noise-sensitive rooms.

- **5.13-4d:** The City shall require that mixed-use development be designed to minimize exposure of noise-sensitive uses from adjacent noise sources and require full disclosure of the potential noise impacts of living in a mixed-use development by requiring residential disclosure notices within deeds and lease agreements as a condition of project approval.
- 5.13-4e: The City shall review and comment on transportation capital projects and operations sponsored by Caltrans and other agencies to minimize exposure of noise-sensitive uses within the city to adverse levels of transportation-related noise, including noise associated with freeways, major arterials, bus transit, and rail lines.
- **5.13-5a:** For development involving construction activities within 500 feet of existing sensitive land uses (places where people sleep or buildings containing vibration-sensitive uses), the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analysis that identifies vibration-reducing measures to ensure the project construction does not exceed applicable vibration criteria (e.g., FTA, Caltrans) for the purpose of preventing disturbance to sensitive land uses and structural damage. The analysis shall include, but is not limited to, the following requirements:
 - Ground vibration-producing activities, such as pile driving, shall be limited to the daytime hours between 7:00 a.m. to 8:00 p.m. on weekdays and prohibited on Sundays and holidays.
 - If pile driving is used, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile.
 - Maximize the distance between construction equipment and vibration-sensitive land uses.
 - Earthmoving, blasting and ground-impacting activities shall be prohibited from occurring at the same time if simultaneous activity would result in exceedance of vibration criteria.
 - Where pile driving is proposed, alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, nondisplacement piles, pile cushioning, torque or hydraulic piles) shall be implemented when the project cannot otherwise demonstrate vibration levels in compliance with the structural damage threshold.
 - Minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving) for the purpose of preventing damage to nearby structures shall be established. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (100 feet for pile driving, 25 feet for other construction activity) can be revised only if a project-specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that demonstrates, as determined by the City, that the structural damage vibration threshold would not be exceeded.

- Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving) for the purpose of preventing negative human response shall be established based on the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the type of sensitive receptor. Established setback requirements (500 for pile driving, 80 for other construction) can be revised only if a project-specific ground vibration study demonstrates, as determined by the City, that receptors would not be exposed to ground vibration levels in excess of negative human response vibration threshold levels, depending on the frequency of the event and receiver type.
- All vibration-inducing activity within the established setback distances for preventing structural damage and negative human response shall be monitored and documented to compare recorded ground vibration noise and vibration noise levels at affected sensitive land uses to the applicable vibration threshold values. The results included recorded vibration data shall be submitted to the City.
- 5.13-5b: For projects proposed within 600 feet of commuter rail/high-speed rail/freight rail, or rail with combined services, the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analyses to evaluate vibration exposure from nearby transit sources. The vibration assessment shall be prepared by a qualified acoustical engineer or noise specialist in accordance with Federal Transit Administration (FTA) vibration impact criteria, or other applicable City policy in place at the time of project application submittal. The assessment shall determine vibration levels at specific building locations and identify structural mitigation measures (e.g., isolation strip foundations, insulated windows and walls, sound walls or barriers, distance setbacks, or other construction or design measures) that would reduce vibration to acceptable levels for the receptor and source type.
- **5.13-5c:** The City shall evaluate new transportation capital projects and operations sponsored by other agencies for structural vibration impacts and vibration annoyance impacts, consistent with City-approved methodologies (e.g., Caltrans, FTA guidance).

5.13.1.2 Existing Conditions

Existing Noise- and Vibration-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include uses where noise exposure could result in health-related risks to individuals as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Land uses such as parks, schools, historic sites, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels. Places of worship, transit lodging, and other places where low interior noise levels are essential are also considered noise sensitive. Noise-sensitive uses are also considered vibration-sensitive land uses, as are commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

Existing Traffic Noise Levels

Several major roadways run through the city and contribute a notable amount of noise to the ambient environment. These roadways include the I-15 and SR-210 freeways as well as Foothill Boulevard and Base Line Road, which are major local roadways. Additionally, the I-10 freeway lies approximately 0.7 miles south of the city, and vehicles travelling along this route may also noticeably contribute to the city's ambient noise during quieter periods, such as evenings. This section provides the existing traffic noise contours developed using existing conditions (2021) traffic data prepared for the 2040 General Plan Mobility analysis. Traffic noise data for all modeled roadways, including distances to the 75 dBA, 70 dBA, 65 dBA, and 60 dBA CNEL contours, are presented in Table 5.13-4.

		Noise (dBA CNEL) at	Noise Contour Dista (Feet)			tance
	Corridor and Segment	100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA
1	Wilson Ave from Carnelian St to Archibald Ave	57.5	7	15	31	68
2	Wilson Ave from Archibald Ave to Haven Ave	59.5	9	20	43	92
3	Wilson Ave from Haven Ave to Milliken Ave	61.5	12	27	58	125
4	Wilson Ave from Milliken Ave to Etiwanda Ave	55.7	5	11	24	51
5	Wilson Ave from Etiwanda Ave to City Limits	59.5	9	20	43	92
6	Banyan St from Carnelian St to Archibald Ave	52.5	3	7	15	32
7	Banyan St from Archibald Ave to Haven Ave	53.3	4	8	17	36
8	Banyan St from Haven Ave to Milliken Ave	62.9	16	34	72	156
9	Banyan St from Milliken Ave to Etiwanda Ave	62.5	15	32	69	148
10	Banyan St from Etiwanda Ave to Wardman Bollock Rd	62.0	13	29	63	135
11	19th St from Carnelian St to Archibald Ave	64.8	21	45	96	207
12	19th St from Archibald Ave to Haven Ave	64.5	20	42	92	197
13	Base Line Rd from Carnelian St to Archibald Ave	64.8	21	44	96	206
14	Base Line Rd from Archibald Ave to Haven Ave	64.5	20	42	91	197
15	Base Line Rd from Haven Ave to Milliken Ave	66.7	27	59	128	275
16	Base Line Rd from Milliken Ave to Etiwanda Ave	67.9	33	71	153	329
17	Church St west of Archibald Ave	58.1	7	16	35	75
18	Church St from Archibald Ave to Haven Ave	60.5	11	23	50	107
19	Church St from Haven Ave to Milliken Ave	63.7	18	38	82	176
20	Church St from Milliken Ave to Day Creek Blvd	65.4	23	49	106	228
21	Church St from Day Creek Blvd to Etiwanda Ave	64.0	18	40	86	185

Table 5.13-4 Existing (2021) Traffic Noise Levels and Contour Distances

		Noise (dBA CNEL) at	Noise Contour Distance (Feet)			NEL) at (Fee	tance
		100 feet from Roadway	75	70	65	60	
	Corridor and Segment	Centerline	dBA	dBA	dBA	dBA	
22	Church St from Etiwanda Ave to East Ave	58.9	8	18	39	84	
23	Foothill Blvd from City Limits to Carnelian St/Vineyard Ave	68.5	36	78	169	363	
24	Foothill Blvd from Carnelian St/Vineyard Ave to Archibald Ave	68.4	36	77	165	356	
25	Foothill Blvd from Archibald Ave to Haven Ave	69.8	45	96	207	446	
26	Foothill Blvd from Haven Ave to Milliken Ave	70.9	53	113	244	526	
27	Foothill Blvd from Milliken Ave to Day Creek Blvd	71.2	55	119	256	551	
28	Foothill Blvd from Day Creek Blvd to Etiwanda Ave	72.6	68	147	316	681	
29	Foothill Blvd from Etiwanda Ave to City Limits	70.8	52	113	243	524	
30	Arrow Rte from City Limits to Vineyard Ave	66.1	25	54	117	253	
31	Arrow Rte from Vineyard Ave to Archibald Ave	67.4	31	67	144	310	
32	Arrow Rte from Archibald Ave to Haven Ave	67.9	33	72	155	334	
33	Arrow Rte from Haven Ave to Milliken Ave	69.1	40	86	186	401	
34	Arrow Rte from Milliken Ave to Etiwanda Ave	68.8	38	82	178	383	
35	Arrow Rte from Etiwanda Ave to City Limits	67.2	30	64	139	299	
36	6th St from City Limits to Archibald Ave	63.6	17	37	81	174	
37	6th St from Archibald Ave to Haven Ave	65.1	22	47	102	219	
38	6th St from Haven Ave to Milliken Ave	65.1	22	47	101	217	
39	6th St from Milliken Ave to Etiwanda Ave	61.4	12	27	57	124	
40	4th St from Archibald Ave to Haven Ave	67.2	30	65	139	300	
41	4th St from Haven Ave to Milliken Ave	69.0	39	84	180	388	
42	4th St from Milliken Ave to Etiwanda Ave	70.3	49	105	226	486	
43	Vineyard Ave from City Limits to Arrow Rte	68.3	35	76	164	354	
44	Vineyard Ave from Arrow Rte to Foothill Blvd	67.6	32	69	148	319	
45	Vineyard Ave/Carnelian St from Foothill Blvd to Base Line Rd	68.1	35	75	161	347	
46	Carnelian St from Base Line Rd to 19th St	67.4	31	66	143	308	
47	Carnelian St from 19th St to Wilson Ave	67.1	30	64	139	299	
48	Archibald Ave from 4th St to 6th St	68.4	36	78	168	363	
49	Archibald Ave from 6th St to Arrow Rte	67.7	32	69	150	322	
50	Archibald Ave from Arrow Rte to Foothill Blvd	66.9	29	62	133	286	
51	Archibald Ave from Foothill Blvd to Base Line Rd	67.6	32	68	147	317	
52	Archibald Ave from Base Line Rd to 19th St	67.5	32	68	147	316	
53	Archibald Ave from 19th St to Wilson Ave	64.7	20	44	94	203	

		Noise (dBA CNEL) at	Noise Contour Distance (Feet)			tance
	Corridor and Segment	100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA
54	Haven Ave from 4th St to 6th St	72.1	63	136	292	630
55	Haven Ave from 6th St to Arrow Rte	71.7	59	128	275	593
56	Haven Ave from Arrow Rte to Foothill Blvd	70.7	51	110	236	509
57	Haven Ave from Foothill Blvd to Base Line Rd	70.2	47	101	217	467
58	Haven Ave from Base Line Rd to 19th St	69.1	39	85	183	395
59	Haven Ave from 19th St to Wilson Ave	69.2	40	87	187	403
60	Milliken Ave from 4th St to 6th St	71.5	57	124	266	574
61	Milliken Ave from 6th St to Arrow Rte	71.2	55	118	254	547
62	Milliken Ave from Arrow Rte to Foothill Blvd	69.5	42	91	197	424
63	Milliken Ave from Foothill Blvd to Base Line Rd	68.8	38	82	176	379
64	Milliken Ave from Base Line Rd to Wilson Ave	66.0	25	54	115	248
65	Day Creek Blvd from Foothill Blvd to Base Line Rd	68.6	37	80	172	371
66	Day Creek Blvd from Base Line Rd to Banyan St	67.0	29	63	135	291
67	Etiwanda Ave from 4th St to 6th St	71.9	62	134	288	621
68	Etiwanda Ave from 6th St to Arrow Rte	70.4	49	105	227	488
69	Etiwanda Ave from Arrow Rte to Foothill Blvd	69.4	42	91	196	423
70	Etiwanda Ave from Foothill Blvd to Base Line Rd	64.3	19	41	88	191
71	Etiwanda Ave from Base Line Rd to Wilson Ave	61.2	12	26	56	120
Free	way		•	•	•	
72	SR 210 from Carnelian Street to Archibald Ave	81.1	267	575	1,238	2,667
73	SR 210 from Archibald Ave to Haven Ave	80.3	239	515	1,110	2,392
74	SR 210 from Haven Ave to Milliken Ave	80.4	240	518	1,115	2,402
75	SR 210 from Milliken Ave to Day Creek Blvd	80.5	246	530	1,142	2461
76	SR 210 from Day Creek Blvd to I 15	78.9	192	413	891	1,919
77	I -15 from Wilson Ave to SR 210	76.4	152	327	704	1,516
78	I -15 from SR 210 to Baseline Ave	76.7	160	345	742	1,600
79	I -15 from Baseline Ave to Foothill Blvd	76.9	163	351	756	1,629
80	I -15 from Foothill Blvd to 4th St	77.5	181	390	839	1,808

Notes: dBA= A-weighted noise levels.

Source: Ascent Environmental, Inc. 2021.

Existing Aircraft Noise Levels

The closest airport to Rancho Cucamonga is the Ontario International Airport (ONT), approximately one mile south of the city's southern border. According to the latest noise contour (4th Quarter 2009 by Los Angeles World Airports), Rancho Cucamonga's southern border is approximately a mile north of the Ontario International Airport's 65 dBA CNEL noise contour. Therefore, aircraft noise does not significantly impact the city.

Existing Railroad Noise and Vibration Levels

Two east-west rail lines lie in the vicinity of Rancho Cucamonga. The Alameda Corridor East rail line does pass through San Bernardino County; however, it is nearly one mile to the south of the city's southern boundary and does not pass through Rancho Cucamonga proper. The modeled train noise impact to the city from the Alameda Corridor has been estimated to be less than 65 CNEL (City of Rancho Cucamonga 2010). Thus, noise and vibration from this line does not have a significant noise impact on the city.

There is an additional pair of east-west rail lines that run through the southern portion of the city. Metrolink passenger trains and BNSF freight trains run along the double-tracked corridor (eastbound and westbound) just north of East 8th Street. As verified by Metrolink's train schedule for the Rancho Cucamonga station in April 2020, during normal service conditions, a total of 38 Metrolink trains pass through the City of Rancho Cucamonga each weekday, with an additional late-night train on Fridays. Of the total Metrolink trains, 30 are scheduled to operate between 7 a.m. and 10 p.m. While this rail line is primarily used as a secondary route for freight trains, it was conservatively assumed that an average of two BNSF freight trains pass through the city each day between 7 a.m. and 10 p.m.

Noise levels along these railways are dependent on several factors, including the location of railroad crossings, where noise levels are greater due to horns blowing. Railway noise modeling performed by Ascent in 2020 determined that CNEL noise levels for both Metrolink and BNSF trains at railroad crossings are as high as 81.7 dBA at a distance of 50 feet from the center of the two tracks. CNEL noise levels along other portions of the track, segments at least 1,000 feet from any crossings, are as low as 64.5 dBA at a distance of 50 feet from the tracks.

Existing Stationary Sources of Noise

Industrial operations are the primary stationary noise sources that contribute to local community noise levels. These stationary sources (e.g., loading areas, large mechanical equipment, fabrication) are often in commercially and industrially zoned areas and are isolated from noise-sensitive land uses. However, when noise-sensitive land uses such as residential uses are located close to industrial noise sources, they may be affected to a greater extent. Other noise sources that affect sensitive receptors in the city include commercial land uses or those often associated with and/or secondary to residential development, including nightclubs, outdoor dining areas, gas stations, car washes, drive throughs, fire stations, air conditioning units, swimming pool pumps, school playgrounds, athletic and music events, and public parks.

Temporary Construction Noise

Construction is a temporary source of noise for residences and business near construction sites. Construction noise can be significant for short periods of time at any location as a result of public improvement projects, private development projects, and remodeling. The greatest level of noise occurs during the grading and site excavation phases. Large earth-moving equipment, such as grader, scrapers, and bulldozers, generated maximum noise levels of 80 to 85 dB when measured at 50 feet from a construction site. Other construction equipment, such as pile drivers, can generate levels of noise up to 101 dB at 50 feet (Ascent 2020). Construction activities can elevate noise levels at adjacent land uses by 15 to 20 dB or more, depending on the project.

5.13.2 THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, noise policies and standards in the City's Municipal Code, proposed 2040 General Plan Noise Element policies, and Caltrans and FTA vibration and noise standards, implementation of the 2040 General Plan would result in a significant impact related to noise or vibration if it would:

- N-1 Generate a substantial temporary increase in ambient noise levels at noise-sensitive land uses in excess of the following standards established by the City:
 - For residential, schools, churches, or similar land uses, construction noise would result in a significant impact if activities were to take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and exceed the noise standard of 65 dBA Leq when measured at the adjacent property line.
 - For a commercial or industrial use, construction noise would result in a significant impact if activities were to take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and exceed the noise standard of 70 dBA Leq when measured at the adjacent property line.
- N-2 Generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess of the following standards:
 - Where noise levels currently do not exceed applicable noise compatibility standards in the proposed General Plan Update Noise Element Table N-1 (e.g., 60 dBA CNEL for low density residential and 70 dBA for high-density/infill uses) but would exceed Table N-1 standards for the same land use as a result of project implementation; or
 - Where Table N-1 land use compatibility noise standards are currently exceeded, result in substantial increases in noise (i.e., 3 dB where existing levels are below 65 dBA CNEL, 1 dB where existing levels are between 70 dBA CNEL and 75 dBA and no increase when existing levels are above 75 dBA CNEL).

- N-3 Generate a substantial permanent increase in stationary noise at noise-sensitive uses in excess of the following standards, as measured at adjacent property line (exterior) or within a neighboring home (interior):
 - Exterior: 60 dBA (10pm–7am), 65 dBA (7am–10pm)
 - Interior: 45 dBA (10pm–7am), 50 dBA (7am–10pm)
- N-4 Expose new sensitive land uses to noise levels in excess of the noise compatibility standards identified in 2040 General Plan Noise Element Table N-1.
- N-5 Generate short-term construction vibration or exposure to new sensitive land uses to long-term operational vibration sources that exceed the following:
 - Structural damage: 0.2 PPV in/sec,
 - For frequent events (i.e., more than 70 events per day): 65 VdB,
 - For occasional events (i.e., 30-70 events): 75 VdB, or
 - For infrequent (i.e., fewer than 30 events per day): 80 VdB.

5.13.3 PLANS, PROGRAMS, AND POLICIES

5.13.3.1 Goals and Policies

The City's General Plan identifies potential noise impacts and methods to minimize the impacts related to noise. The following General Plan policies are applicable to the proposed project:

- **GOAL N-1: NOISE.** A city with appropriate noise and vibration levels that support a range of places from quiet neighborhoods to active, exciting districts.
- **N-1.1 Noise Levels.** Require new development to meet the noise compatibility standards identified in Table N-1.
- N-1.2 Noise Barriers, Buffers and Sound Walls. Require the use of integrated design-related noise reduction measures for both interior and exterior areas prior to the use of noise barriers, buffers, or walls to reduce noise levels generated by or affected by new development.
- **N-1.3 Non-Architectural Noise Attenuation.** Non-architectural noise attenuation measures such as sound walls, setbacks, barriers, and berms shall be discouraged in pedestrian priority areas (or other urban areas or areas where pedestrian access is important).
- N-1.4 New Development Near Major Noise Sources. Require development proposing to add people in areas where they may be exposed to major noise sources (e.g., roadways, rail lines, aircraft, industrial or other non-transportation noise sources) to conduct a project level noise analysis and implement recommended noise reduction measures.

- N-1.5 Urban and Suburban Development Near Transit. Allow development located in infill areas, near transit hubs, or along major roadways an exemption from exterior noise standards for secondary open space areas (such as front yards, parking lots, stoops, porches, or balconies), if noise standards can be met for primary open space.
- N-1.6 Rail Crossing Quiet Zones. Allow the establishment of a full or partial atgrade rail crossing or quiet zone near transit hubs or residential development.
- **N-1.7 Entertainment.** Establish different standards for exterior noise consistent with the place type.
- **N-1.8 Vibration Impact Assessment.** Require new development to reduce vibration to 85 VdB or below within 200 feet of an existing structure.

5.13.4 ENVIRONMENTAL IMPACTS

5.13.4.1 Methodology

Construction Noise and Vibration

To assess potential short-term noise and vibration impacts that could result from construction activities associated with future development under the 2040 General Plan, typical construction source noise and vibration levels were determined based on methodologies, reference noise levels, and usage factors from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (FTA 2018) and the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006). Reference levels are noise and vibration levels for specific equipment or activity types that are well documented in the field of acoustics.

Specific equipment, techniques, locations, timing, and other project-specific construction activity details associated with future development under 2040 General Plan implementation are not available at this time. However, to evaluate potential construction noise and vibration impacts, typical construction equipment used for typical construction activities that would occur with implementation of the 2040 General Plan, such as site preparation/foundation work, utility improvements, roadway improvements, and vertical construction, were analyzed.

Operational Noise and Vibration

Assessment of potential long-term (operational) noise impacts resulting from increases in traffic volumes on freeways and roadways in the city due to development under the 2040 General Plan was conducted using modeling based on the California Department of Transportation's (Caltrans) traffic noise analysis protocol and technical noise supplement (Caltrans 2013), and the San Bernardino Transportation Analysis Model (SBTAM) which is owned and maintained by San Bernardino County Transit Authority (SBCTA) and is a subarea model of the Southern California Association of Governments (SCAG) regional model and was last updated in 2019. To assess noise impacts, traffic noise levels under existing (2021) and forecast year 2040 conditions for affected freeway and roadway segments were modeled. In addition,

distances from each roadway to noise contours (75 dBA, 70 dBA, 65 dBA, 60 dBA CNEL) were calculated. The analysis is based on the reference noise emission levels for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors. Truck usage and vehicle speeds were estimated based on the traffic modeling prepared for the project (Fehr and Peers 2021a). The modeling conducted does not account for the acoustic dampening effects of any natural or human-made shielding (e.g., vegetation, berms, walls, or buildings), and consequently, modeled noise levels may be overestimated where such shieling exists.

To assess noise and vibration impacts from railroads, Transit Noise and Vibration Impact Assessment (FTA 2018) was used to determine approximate vibration levels in proximity to rail lines. Railroad noise modeling was conducted using FTA guidance and procedures for the future (2040) conditions based on available data (e.g., engine type, trains per day) for the planned railroads in and near the city (i.e., Metrolink, Brightline High-Speed Rail [HSR], Metro Gold Line), obtained from project-specific data available for the project (Fehr and Peers 2021).

Stationary sources, primarily from industrial and commercial land uses, were also evaluated using available reference noise levels for various common noise sources. Impacts were assessed using City-adopted and -proposed noise standards, including standards in the municipal code and proposed in the 2040 General Plan.

The closest airport to Rancho Cucamonga is the Ontario International Airport (ONT), approximately one mile south of the city's southern border. According to the latest noise contour (4th Quarter 2009 by Los Angeles World Airports), Rancho Cucamonga's southern border is approximately 1 mile north of the Ontario International Airport's 65 dBA CNEL noise contour. Therefore, aircraft noise does not significantly impact the city and is not discussed further in this section.

5.13.4.2 Impact Analysis

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-1: Construction activities would result in temporary noise increases in the vicinity of the future development under the General Plan. [Threshold N-1]

The 2040 General Plan would accommodate construction of various land use development projects throughout the city by 2040. The residential, commercial, mixed use, and industrial land use designations of the 2040 General Plan would include single-family homes, low-rise multifamily developments, office, hotels and/or recreational uses, one- to two-story structures for retail, and industrial employment-generating uses, such as R&D, manufacturing, warehousing, and distribution.

The City has established standards for acceptable noise levels in Section 17.66.050 of the Development Code for construction activities affecting various land uses. For all standards, noise limits are measured at the adjacent property line. Based on these standards, for purposes of this analysis construction noise levels are considered substantial when they occur at a residential, school, church, or similar land use between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturdays, or any time on Sunday or a national holiday and exceed 65 dBA.

Additionally, construction noise levels are considered substantial when they occur at a commercial or industrial land use between 10:00 p.m. and 6:00 a.m., including Saturday and Sunday, and exceed 70 dBA at these uses. Although the Development Code does not specify, the noise levels are assumed to be hourly average (L_{eq}) for purposes of this analysis because construction noise typically fluctuates throughout the day; thus, an average level is typically applied to construction noise.

The highest noise levels from the types of construction activities that would take place under 2040 General Plan implementation usually occur during the grading and site excavation phases. Large earth-moving equipment like graders, scrapers, and dozers generate maximum noise levels between 80 to 85 dBA when measured at 50 feet from a construction site. Other construction equipment like pile drivers can generate noise levels up to 101 dB at 50 feet (FTA 2018). Hence, construction activities with multiple pieces of equipment working at the same time can result in substantial temporary noise increases at sensitive land uses, depending on several factors, such as the specific construction activities taking place, proximity of the activities to nearby land uses, and the presence or absence of any natural or human-made barriers with potential acoustic dampening effects (e.g., the presence of vegetation, berms, walls, or buildings).

Construction noise can be characterized based on the type of activity and associated equipment needed and, in this analysis, is evaluated by considering noise levels associated with site preparation/foundation work, utility improvements (e.g., trenching, pipe/transmission line installation), roadway improvements (e.g., grading, paving), and vertical construction (e.g., residential, commercial, or other structures). Reference noise levels for typical construction equipment required for these activities are shown in Table 5.13-5.

Equipment Type	Typical Noise Level (Lmax dBA) @ 50 feet
Air Compressor	80
Backhoe/Loader	80
Compactor	82
Concrete Mixer	85
Concrete Vibrator	76
Crane, Mobile	83
Dozer	85
Generator/Pump	82
Grader	85
Jack Hammer	88

Table 5.13-5 Reference Noise Levels from Typical Construction Equipmen	Table 5.13-5	Reference Noise Levels from Typical Construction Equipment
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Equipment Type	Typical Noise Level (Lmax dBA) @ 50 feet
Paver	85
Pile-driver (Impact)	101
Pile-driver (Sonic)	95
Trucks	84

Source: Ascent 2021.

Note: Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

L_{max} = maximum instantaneous noise level

Assuming simultaneously operating equipment and typical reference noise levels for construction equipment, representative noise levels for various types of construction activity are shown in Table 5-13.6. Based on reference noise levels for typical construction equipment and activities, construction activities without pile driving could result in noise levels of up to approximately 86 dBA L_{eq} at 50 feet from the source, and construction activities that involve pile driving could reach noise levels of up to approximately 91 dBA L_{eq} at 50 feet from the source.

Table 5.13-6 Noise Levels from Construction Activities

Construction Activity	Representative Noise Level (L _{eq} dBA) @ 50 feet
Site Preparation/Foundation Work	87.5
Building Construction	86.2
Building Construction with Pile Driving	90.5
Roadway Construction/Improvements	87.2
Utility Installation/Improvements	88.1

Source: Ascent 2021.

Note: Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Leg = equivalent noise level; Lmax = maximum instantaneous noise level

Future development under the 2040 General Plan would occur over an approximately 20-year period until 2040 and would generate temporary noise level increases on and adjacent to individual construction sites. Because there are no specific plans or time scales for individual, future development projects under the 2040 General Plan, it is currently not possible to determine site-specific construction noise levels, locations, or time periods for construction phases. Demolition and construction activity would, in some cases, occur near existing residences and other noise-sensitive receptors and extend over the course of several weeks to months, or even longer depending on the individual development type and other project- and location-specific circumstances.

Noise levels from point sources such as construction sites typically attenuate at a rate of about 6 dBA per doubling of distance from the source (FTA 2018). Therefore, considering building construction noise of 86 dBA L_{eq} without pile driving, residential, schools, churches, or similar uses within 580 feet of construction activity, and commercial/industrial uses within 330 feet construction activity may be exposed to substantial construction noise levels exceeding the City's noise standards of 65 dBA L_{eq} and 70 dBA L_{eq} , respectively. Considering building construction noise with pile driving, of 91 dBA L_{eq} , residential, schools, churches, or similar uses within 1,000 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity, and commercial/industrial uses within 530 feet of construction activity may be exposed to substantial construction noise levels exceeding the City's noise standards.

In addition, certain types of construction work, such as utility installation and roadway improvements associated with 2040 General Plan implementation could periodically occur during nighttime hours (for example to avoid causing traffic congestion) and expose existing or future residential, schools, churches, or similar uses, and commercial/industrial uses to substantial noise levels during the sensitive times of the day (i.e., 8:00 p.m. to 7:00 a.m. on weekdays, including Saturday, or any time on Sunday and national holidays for residential, churches, schools or similar uses, and between 10:00 p.m. and 6.00 a.m. on weekdays, including Saturday for commercia/industrial uses). Therefore, the development associated with the 2040 General Plan would generate substantial temporary increases in construction noise levels. This impact would be potentially significant.

Implementation of standard condition of approval 5.13-1, which requires project applicants to prepare a site-specific construction noise analysis and, if required, implement measures to demonstrate compliance with the City's noise standards, would avoid or substantially lessen potential sleep disturbance associated with nighttime construction noise and avoid or substantially lessen noise levels at properties adjacent to construction sites. Implementation of this measure would routinely avoid generation of substantial construction noise levels that violate the standards of Development Code Section 17.66.050. However, at the program-level of this analysis, individual construction activities and associated noise exposure at receiving land uses cannot be determined. Because these details are not known at this time, it is not possible to conclude that implementation of standard condition of approval 5.13-1 would avoid generation of substantial temporary construction noise levels that exceed the standards of Development Code Section 17.66.050 for all future development under the 2040 General Plan. Further, available construction noise attenuation measures (e.g., temporary walls, mufflers), can typically achieve a maximum of 10 dB noise reduction, which may not be adequate to achieve noise standards depending on the proximity of construction activities to nearby land uses. Therefore, this impact would be significant and unavoidable.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.13-1 would be potentially significant.

Mitigation Measures

Implementation of standard condition 5.13-1.

Level of Significance After Mitigation: Impact 5.13-1 would be significant and unavoidable.

Impact 5.13-2 Project implementation could generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess local standards. [Threshold N-2]

Land use development that results in traffic increases can also result in long-term traffic noise increases (or decreases) on roadways and freeways in the city. New development and associated traffic noise increases could result in exposure of existing receptors or future planned development to substantial permanent noise increases. This impact discusses substantial long-term traffic noise increases affecting existing receptors because of implementation of the 2040 General Plan. Traffic noise exposure is discussed under Impact 5.13-4.

The 2040 General Plan establishes the land use development pattern for the future of the city and accommodates growth and development, including new residential, commercial, office, open space, and other land uses. As a result of the land use plan, which focuses development into five basic place types, traffic volumes are anticipated to increase on some roads but decrease on others.

The 2040 General Plan includes noise compatibility standards (Table N-1 of the 2040 General Plan Noise Element) that are designed to protect new sensitive land uses from excessive noise levels. Noise compatibility standards vary based on the land use type; thus, depending on the land use type and proximity to existing major freeways/roadways, traffic noise increases could expose existing development to substantial traffic noise levels that exceed applicable noise levels. Although the City has not adopted traffic noise standards, exterior and interior noise compatible levels (Table N-1) establish acceptable ambient noise levels for various land uses. Because traffic noise is a dominant noise source in the city and contributes substantially to the existing ambient noise levels, it is appropriate to use these levels for the purpose of this traffic noise impact analysis. Therefore, noise levels in Table N-1 are the basis of this analysis. In addition to maximum noise exposure levels, when considering long-term increases in noise levels, the incremental increases in noise that a receiver perceives are also important. For purposes of this analysis, a substantial permanent increase in traffic noise increases is defined as one of the following:

- Noise levels currently do not exceed applicable land use compatibility standards in Table N-1 (e.g., 60 dBA CNEL for low density residential and 70 dBA for high-density/infill uses) but would increase to levels that exceed Table N-1 standards for the same land use due to traffic volumes generated by development under the 2040 General Plan; or
- Where land use compatibility noise standards are exceeded in the existing condition (2021), traffic volumes generated by development under the 2040 General Plan would result in one of the following:
 - 3 dB where existing levels are below 65 dBA CNEL, or
 - 1 dB increase when existing levels are between 70 dBA CNEL and 75 dBA, or
 - Any increase when existing levels are above 75 dBA CNEL).

Although 1 dB is not considered audible to the human ear, using it in this analysis is consistent with FTA guidance, because as cumulative noise exposure levels go up, the allowable incremental increase goes down due to people's increased sensitivity to increasing nuisance.

Traffic noise modeling was conducted for existing (2021) and future (2040) conditions using traffic data generated for the 2040 General Plan, which was based on anticipated land use development contemplated under buildout conditions through 2040 (Fehr and Peers 2021). Traffic noise increases are presented in Table 5.13-7, and distances to roadway contours (i.e., 60 dBA, 65 dBA, 70 dBA, and 75 dBA CNEL) are presented in Table 5.13-8.

		Noise (dBA CNEL) at 100 feet from Roadway Centerline			
	Corridor and Segment	Existing (2021)	Future (2040)	Change	
1	Wilson Ave from Carnelian St to Archibald Ave	57.5	59.4	1.9	
2	Wilson Ave from Archibald Ave to Haven Ave	59.5	61.6	2.1	
3	Wilson Ave from Haven Ave to Milliken Ave	61.5	63.1	1.7	
4	Wilson Ave from Milliken Ave to Etiwanda Ave	55.7	57.2	1.5	
5	Wilson Ave from Etiwanda Ave to City Limits	59.5	61.3	1.8	
6	Banyan St from Carnelian St to Archibald Ave	52.5	52.9	0.4	
7	Banyan St from Archibald Ave to Haven Ave	53.3	53.4	0.1	
8	Banyan St from Haven Ave to Milliken Ave	62.9	63.9	1.0	
9	Banyan St from Milliken Ave to Etiwanda Ave	62.5	63.2	0.6	
10	Banyan St from Etiwanda Ave to Wardman Bollock Rd	62.0	63.0	1.0	
11	19th St from Carnelian St to Archibald Ave	64.8	65.6	0.9	
12	19th St from Archibald Ave to Haven Ave	64.5	65.4	0.9	
13	Base Line Rd from Carnelian St to Archibald Ave	64.8	65.4	0.6	
14	Base Line Rd from Archibald Ave to Haven Ave	64.5	65.2	0.7	
15	Base Line Rd from Haven Ave to Milliken Ave	66.7	67.8	1.2	
16	Base Line Rd from Milliken Ave to Etiwanda Ave	67.9	69.7	1.8	
17	Church St west of Archibald Ave	58.1	58.9	0.8	
18	Church St from Archibald Ave to Haven Ave	60.5	62.2	1.7	
19	Church St from Haven Ave to Milliken Ave	63.7	65.0	1.2	
20	Church St from Milliken Ave to Day Creek Blvd	65.4	66.3	0.9	
21	Church St from Day Creek Blvd to Etiwanda Ave	64.0	65.4	1.3	
22	Church St from Etiwanda Ave to East Ave	58.9	60.0	1.0	
23	Foothill Blvd from City Limits to Carnelian St/Vineyard Ave	68.5	69.2	0.7	
24	Foothill Blvd from Carnelian St/Vineyard Ave to Archibald Ave	68.4	70.1	1.7	

Table 5.13-7 Existing (2021) and Future (2040) Traffic Noise Levels

		Noise (dBA CNEL) at 100 feet from Roadway Centerline		
	Corridor and Segment	Existing (2021)	Future (2040)	Change
25	Foothill Blvd from Archibald Ave to Haven Ave	69.8	70.9	1.1
26	Foothill Blvd from Haven Ave to Milliken Ave	70.9	71.7	0.8
27	Foothill Blvd from Milliken Ave to Day Creek Blvd	71.2	72.6	1.3
28	Foothill Blvd from Day Creek Blvd to Etiwanda Ave	72.6	73.5	0.9
29	Foothill Blvd from Etiwanda Ave to City Limits	70.8	71.4	0.5
30	Arrow Rte from City Limits to Vineyard Ave	66.1	67.1	1.0
31	Arrow Rte from Vineyard Ave to Archibald Ave	67.4	68.1	0.7
32	Arrow Rte from Archibald Ave to Haven Ave	67.9	69.1	1.2
33	Arrow Rte from Haven Ave to Milliken Ave	69.1	70.1	1.0
34	Arrow Rte from Milliken Ave to Etiwanda Ave	68.8	70.2	1.5
35	Arrow Rte from Etiwanda Ave to City Limits	67.2	68.9	1.7
36	6th St from City Limits to Archibald Ave	63.6	64.5	0.9
37	6th St from Archibald Ave to Haven Ave	65.1	66.1	1.0
38	6th St from Haven Ave to Milliken Ave	65.1	66.7	1.6
39	6th St from Milliken Ave to Etiwanda Ave	61.4	62.6	1.2
40	4th St from Archibald Ave to Haven Ave	67.2	68.3	1.1
41	4th St from Haven Ave to Milliken Ave	69.0	70.4	1.3
42	4th St from Milliken Ave to Etiwanda Ave	70.3	70.8	0.4
43	Vineyard Ave from City Limits to Arrow Rte	68.3	69.0	0.8
44	Vineyard Ave from Arrow Rte to Foothill Blvd	67.6	68.5	0.9
45	Vineyard Ave/Carnelian St from Foothill Blvd to Base Line Rd	68.1	68.6	0.5
46	Carnelian St from Base Line Rd to 19th St	67.4	67.8	0.5
47	Carnelian St from 19th St to Wilson Ave	67.1	67.1	-0.1
48	Archibald Ave from 4th St to 6th St	68.4	69.3	0.9
49	Archibald Ave from 6th St to Arrow Rte	67.7	68.5	0.8
50	Archibald Ave from Arrow Rte to Foothill Blvd	66.9	67.9	1.0
51	Archibald Ave from Foothill Blvd to Base Line Rd	67.6	68.2	0.6
52	Archibald Ave from Base Line Rd to 19th St	67.5	67.8	0.3
53	Archibald Ave from 19th St to Wilson Ave	64.7	64.6	-0.1
54	Haven Ave from 4th St to 6th St	72.1	72.7	0.6

		Noise (dBA CNEL) at 100 feet from Roadway Centerline		
	Corridor and Segment	Existing (2021)	Future (2040)	Change
55	Haven Ave from 6th St to Arrow Rte	71.7	72.6	0.9
56	Haven Ave from Arrow Rte to Foothill Blvd	70.7	71.3	0.6
57	Haven Ave from Foothill Blvd to Base Line Rd	70.2	70.7	0.6
58	Haven Ave from Base Line Rd to 19th St	69.1	69.6	0.5
59	Haven Ave from 19th St to Wilson Ave	69.2	69.3	0.2
60	Milliken Ave from 4th St to 6th St	71.5	72.6	1.1
61	Milliken Ave from 6th St to Arrow Rte	71.2	71.7	0.5
62	Milliken Ave from Arrow Rte to Foothill Blvd	69.5	70.5	1.0
63	Milliken Ave from Foothill Blvd to Base Line Rd	68.8	70.2	1.4
64	Milliken Ave from Base Line Rd to Wilson Ave	66.0	66.7	0.8
65	Day Creek Blvd from Foothill Blvd to Base Line Rd	68.6	69.3	0.7
66	Day Creek Blvd from Base Line Rd to Banyan St	67.0	67.8	0.8
67	Etiwanda Ave from 4th St to 6th St	71.9	73.5	1.5
68	Etiwanda Ave from 6th St to Arrow Rte	70.4	72.4	2.0
69	Etiwanda Ave from Arrow Rte to Foothill Blvd	69.4	70.8	1.4
70	Etiwanda Ave from Foothill Blvd to Base Line Rd	64.3	67.1	2.8
71	Etiwanda Ave from Base Line Rd to Wilson Ave	61.2	63.0	1.8
Free	ways			
72	SR 210 from Carnelian Street to Archibald Ave	81.1	80.3	-0.7
73	SR 210 from Archibald Ave to Haven Ave	80.3	79.7	-0.7
74	SR 210 from Haven Ave to Milliken Ave	80.4	79.7	-0.7
75	SR 210 from Milliken Ave to Day Creek Blvd	80.5	79.9	-0.7
76	SR 210 from Day Creek Blvd to I 15	78.9	78.3	-0.6
77	I -15 from Wilson Ave to SR 210	76.4	78.9	2.5
78	I -15 from SR 210 to Baseline Ave	76.7	79.0	2.3
79	I -15 from Baseline Ave to Foothill Blvd	76.9	78.8	1.9
80	l -15 from Foothill Blvd to 4th St	77.5	79.2	1.7

Source: Ascent Environmental in 2021; based on traffic data provided by Fehr and Peers (2021).

Notes: SR = State Route; dBA = a-weighted decibels; n/a = not available

As shown in Table 5.13-7, there are two segments (segments 2 and 5) where traffic noise levels would increase from below 60 dBA CNEL to above 60 dBA CNEL (i.e., the exterior noise level standard for single-family residences located near these segments) as a result of General Plan Update implementation. There are eight segments (segments 24, 25, 33, 34, 41, 62, 63, 69) where traffic noise would increase from below 70 dBA to above 70 dBA (i.e., the exterior noise level standard for mixed use and infill development). In addition, on numerous segments that exceed 70 dBA CNEL in the existing condition (2021), noise levels would increase by more than 1 dB and on all freeway segments; and on four segments (segments 77, 78, 79, 80) that exceed 75 dBA in the existing condition (2021), there would be noise increases as a result of implementation of the 2040 General Plan.

General Plan Policy N-1.1 requires new development to meet the noise compatibility standards identified in Table N-1 and Policy N-1.2 requires the use of design-related noise reduction measures to achieve interior and exterior noise standards. However, future project-specific components and details of all development under General Plan implementation cannot be known at this time, including project-specific traffic noise increases, exposure of existing development to project-specific traffic noise increases, and the project-specific feasibility and effectiveness of noise attenuation measures (e.g., setbacks, building insulation, sound barriers). Therefore, at this program level of analysis it is not possible to conclude that it would be feasible for all development under the 2040 General Plan to achieve compliance with the noise compatibility standards of Table N-1; some future development would result in substantial permanent traffic noise increases that do not meet the standards of Table N-1.

The focus areas of the city identified for higher concentrations of new development in the 2040 General Plan are also areas that experience higher traffic and traffic noise levels in the existing condition, as new development would be focused near major mobility corridors and in focused development areas with higher traffic congestion relative to other areas of the city. Although the 2040 General Plan land use pattern would reduce traffic noise on some segments, the increases in traffic volumes result in substantial long-term increases in traffic noise along the segments described above. This impact would be potentially significant.

Standard condition of approval 5.13-2 requires project applicants to prepare a traffic noise study that evaluates potential traffic noise impacts on existing noise sensitive receptors and implementation of noise reduction measures, as needed. Implementation of this standard condition of approval would routinely avoid exposure of sensitive receptors to substantial permanent traffic noise levels. However, there may be cases where noise reduction measures are either infeasible or inadequate for reducing traffic noise to less than significant level. For example, due to limited space within the roadway right-of-way, a sound wall cannot always be built. Therefore, because there may be cases where discretionary development could result in project-generated traffic noise above the City standards and such project-generated noise would not always be reduced to acceptable levels, this impact would be significant and unavoidable.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.13-2 would be potentially significant.

Mitigation Measures

Implementation of standard condition of approval 5.13-2.

Level of Significance After Mitigation: Impact 5.13-2 would be significant and unavoidable.

Impact 5.13-3: The project could generate a substantial permanent increase in stationary noise at noise-sensitive uses that exceeds City standards. [Threshold N-3]

Development under the 2040 General Plan would include various stationary noise sources. Typical commercial and industrial noise sources include loading dock operations, parking lot activity, on-site equipment (including heating and air conditioning), and heavy truck idling. Other stationary noise sources of concern typically include generators, pumps, air compressors, outdoor speakers, motors, heavy equipment, back-up alarms and similar machinery that can be associated with office/business, residential, commercial, and industrial uses.

To evaluate increases in operational stationary noise sources associated with new development, the adopted standards contained in Development Code Section 17.66.050(F) were applied. Specifically, daytime (7:00 a.m. to 10:00 p.m.) standards of 65 dBA L_{eq} /50 dBA L_{eq} (exterior/interior) and nighttime (10:00 p.m.-7:00 a.m.) standards of 60 dBA L_{eq} /45 dBA L_{eq} (exterior/interior) are used in this analysis to determine significance. It should be noted that exterior standards are established such that if complied with, interior noise standards would also be achieved. Thus, this analysis only addresses exterior noise levels.

Loading docks associated with commercial and industrial uses can result in noise levels of 77 dBA Leq at 100 feet (WPWMA 2003), exceeding daytime exterior noise standards within 300 feet of the source and nighttime exterior standards within 450 feet of the source. In addition, stationary equipment such as fans, compressors, or pumps can generate noise levels of 70 dBA Leq at 50 feet (EPA 1971), exceeding daytime exterior noise standards within 80 feet of the source and nighttime exterior standards within 120 feet of the source.

Because new commercial and industrial development under the 2040 General Plan would occur in proximity to existing development, and would include new mixed use development involving commercial and residential land uses in proximity to one another, consistent with the overarching goals of the 2040 General Plan's land plan and vision, new stationary equipment and activities associated with development under the 2040 General Plan could result in substantial stationary noise level increases that exceed adopted exterior, and therefore interior, noise standards. This impact would be potentially significant.

Implementation of standard condition of approval 5.13-3 would require project applicants to analyze and mitigate potential noise impacts from new stationary noise sources to comply with the City's daytime standards of 65 dBA L_{eq} /50 dBA L_{eq} (exterior/interior) and nighttime standards of 60 dBA L_{eq} /45 dBA L_{eq} (exterior/interior), described in Development Code Section

17.66.050(F). Therefore, with the implementation of proper noise-attenuating measures, this impact would be reduced to less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.13-3 would be less than significant.

Mitigation Measures

Implementation of standard conditional of approval 5.13-3.

Level of Significance After Mitigation: Impact 5.13-3 would be less than significant.

Impact 5.13-4: Expose new sensitive land uses to noise levels in excess of the noise compatibility standards identified in 2040 General Plan Noise Element Table N-1. [Threshold N-4]

Implementation of the 2040 General Plan would result in focused growth in areas accommodate growth and development throughout the city, primarily within Focus Areas, including City Centers and along major transit corridors, to facilitate more compact land use patters, walkable communities, and utilize vacant or otherwise available area within already urbanized areas. As a result of the proposed land use plan, new development would be located near existing high-volume roads, existing rail alignments, or in areas where future planned rail could occur, thus exposing new land use development to traffic and rail noise sources. To evaluate noise exposure, noise compatibility standards from Table N-1 of the 2040 General Plan were used. Traffic and rail noise are analyzed separately.

Traffic Noise

To evaluate noise exposure at new sensitive receptors, traffic noise contours for the withproject future (2040) conditions were modeled. The noise contours represent anticipated traffic noise levels based on future traffic and land use development within the city under 2040 General Plan implementation. Traffic noise contours are presented in Table 5.13-8.

		Noise (dBA	Distan	ce (ft) to	Noise Co	ontour
	Corridor and Segment	CNEL) at 100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA
1	Wilson Ave from Carnelian St to Archibald Ave	59.4	9	20	42	91
2	Wilson Ave from Archibald Ave to Haven Ave	61.6	13	27	59	127
3	Wilson Ave from Haven Ave to Milliken Ave	63.1	16	35	75	161
4	Wilson Ave from Milliken Ave to Etiwanda Ave	57.2	7	14	30	65
5	Wilson Ave from Etiwanda Ave to City Limits	61.3	12	26	56	121
6	Banyan St from Carnelian St to Archibald Ave	52.9	3	7	16	34
7	Banyan St from Archibald Ave to Haven Ave	53.4	4	8	17	36
8	Banyan St from Haven Ave to Milliken Ave	63.9	18	39	85	182
9	Banyan St from Milliken Ave to Etiwanda Ave	63.2	16	35	75	162
10	Banyan St from Etiwanda Ave to Wardman Bollock Rd	63.0	16	34	73	157
11	19th St from Carnelian St to Archibald Ave	65.6	24	51	110	236
12	19th St from Archibald Ave to Haven Ave	65.4	23	49	105	227
13	Base Line Rd from Carnelian St to Archibald Ave	65.4	23	49	106	228
14	Base Line Rd from Archibald Ave to Haven Ave	65.2	22	47	102	219
15	Base Line Rd from Haven Ave to Milliken Ave	67.8	33	71	152	328
16	Base Line Rd from Milliken Ave to Etiwanda Ave	69.7	44	94	203	437
17	Church St west of Archibald Ave	58.9	8	18	39	84
18	Church St from Archibald Ave to Haven Ave	62.2	14	30	65	140
19	Church St from Haven Ave to Milliken Ave	65.0	21	46	99	213
20	Church St from Milliken Ave to Day Creek Blvd	66.3	26	57	122	263

Table 5.13-8 With Project (2040) Traffic Noise Levels and Contour Distances

	Noise (dB		Distance (ft) to Noise Contour				
	Corridor and Segment	CNEL) at 100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA	
21	Church St from Day Creek Blvd to Etiwanda Ave	65.4	23	49	105	226	
22	Church St from Etiwanda Ave to East Ave	60.0	10	21	46	99	
23	Foothill Blvd from City Limits to Carnelian St/Vineyard Ave	69.2	40	87	188	405	
24	Foothill Blvd from Carnelian St/Vineyard Ave to Archibald Ave	70.1	46	100	215	464	
25	Foothill Blvd from Archibald Ave to Haven Ave	70.9	53	114	247	531	
26	Foothill Blvd from Haven Ave to Milliken Ave	71.7	60	129	277	597	
27	Foothill Blvd from Milliken Ave to Day Creek Blvd	72.6	68	146	314	676	
28	Foothill Blvd from Day Creek Blvd to Etiwanda Ave	73.5	78	168	362	780	
29	Foothill Blvd from Etiwanda Ave to City Limits	71.4	57	122	263	568	
30	Arrow Rte from City Limits to Vineyard Ave	67.1	29	63	136	294	
31	Arrow Rte from Vineyard Ave to Archibald Ave	68.1	34	74	160	344	
32	Arrow Rte from Archibald Ave to Haven Ave	69.1	40	87	187	402	
33	Arrow Rte from Haven Ave to Milliken Ave	70.1	47	101	219	471	
34	Arrow Rte from Milliken Ave to Etiwanda Ave	70.2	48	103	222	479	
35	Arrow Rte from Etiwanda Ave to City Limits	68.9	39	84	180	389	
36	6th St from City Limits to Archibald Ave	64.5	20	43	92	199	
37	6th St from Archibald Ave to Haven Ave	66.1	25	55	118	254	
38	6th St from Haven Ave to Milliken Ave	66.7	28	60	129	278	
39	6th St from Milliken Ave to Etiwanda Ave	62.6	15	32	69	148	
40	4th St from Archibald Ave to Haven Ave	68.3	35	76	164	354	

		Noise (dBA	Distan	ce (ft) to	Noise Co	ontour
	Corridor and Segment	CNEL) at 100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA
41	4th St from Haven Ave to Milliken Ave	70.4	48	103	221	477
42	4th St from Milliken Ave to Etiwanda Ave	70.8	52	112	241	518
43	Vineyard Ave from City Limits to Arrow Rte	69.0	40	86	184	397
44	Vineyard Ave from Arrow Rte to Foothill Blvd	68.5	37	79	170	365
45	Vineyard Ave/Carnelian St from Foothill Blvd to Base Line Rd	68.6	37	80	173	374
46	Carnelian St from Base Line Rd to 19th St	67.8	33	71	153	330
47	Carnelian St from 19th St to Wilson Ave	67.1	30	64	137	296
48	Archibald Ave from 4th St to 6th St	69.3	42	90	193	416
49	Archibald Ave from 6th St to Arrow Rte	68.5	37	79	170	367
50	Archibald Ave from Arrow Rte to Foothill Blvd	67.9	33	72	155	334
51	Archibald Ave from Foothill Blvd to Base Line Rd	68.2	35	75	161	347
52	Archibald Ave from Base Line Rd to 19th St	67.8	33	71	153	329
53	Archibald Ave from 19th St to Wilson Ave	64.6	20	43	93	201
54	Haven Ave from 4th St to 6th St	72.7	69	149	321	692
55	Haven Ave from 6th St to Arrow Rte	72.6	68	147	318	684
56	Haven Ave from Arrow Rte to Foothill Blvd	71.3	56	121	260	560
57	Haven Ave from Foothill Blvd to Base Line Rd	70.7	51	110	236	509
58	Haven Ave from Base Line Rd to 19th St	69.6	43	92	199	429
59	Haven Ave from 19th St to Wilson Ave	69.3	41	89	192	413
60	Milliken Ave from 4th St to 6th St	72.6	68	147	316	681
61	Milliken Ave from 6th St to Arrow Rte	71.7	59	127	273	589

		Noise (dBA	Distan	ce (ft) to	Noise Co	ontour
	Corridor and Segment	CNEL) at 100 feet from Roadway Centerline	75 dBA	70 dBA	65 dBA	60 dBA
62	Milliken Ave from Arrow Rte to Foothill Blvd	70.5	49	106	229	493
63	Milliken Ave from Foothill Blvd to Base Line Rd	70.2	47	102	219	471
64	Milliken Ave from Base Line Rd to Wilson Ave	66.7	28	60	129	279
65	Day Creek Blvd from Foothill Blvd to Base Line Rd	69.3	41	89	192	413
66	Day Creek Blvd from Base Line Rd to Banyan St	67.8	33	71	153	330
67	Etiwanda Ave from 4th St to 6th St	73.5	78	169	364	785
68	Etiwanda Ave from 6th St to Arrow Rte	72.4	67	143	309	665
69	Etiwanda Ave from Arrow Rte to Foothill Blvd	70.8	52	112	242	521
70	Etiwanda Ave from Foothill Blvd to Base Line Rd	67.1	29	63	136	293
71	Etiwanda Ave from Base Line Rd to Wilson Ave	63.0	16	34	74	159
Free	ways			•		
72	SR 210 from Carnelian Street to Archibald Ave	80.3	278	599	1,291	2,780
73	SR 210 from Archibald Ave to Haven Ave	79.7	250	539	1,162	2,504
74	SR 210 from Haven Ave to Milliken Ave	79.7	252	543	1,170	2,521
75	SR 210 from Milliken Ave to Day Creek Blvd	79.9	259	557	1,200	2,586
76	SR 210 from Day Creek Blvd to I 15	78.3	203	438	943	2,032
77	I -15 from Wilson Ave to SR 210	78.9	222	478	1,030	2,218
78	I -15 from SR 210 to Baseline Ave	79.0	226	487	1,050	2,262
79	I -15 from Baseline Ave to Foothill Blvd	78.8	218	470	1,012	2,180
80	I -15 from Foothill Blvd to 4th St	79.2	235	506	1,090	2,348

Source: Modeling conducted by Ascent Environmental, Inc. 2021.

Notes: dba= A-weighted decibels; Ldn/CNEL= day-night average/community noise equivalent level.

As shown above, future traffic noise levels could be as high as 80.3 dBA on freeways and 73.5 dBA on roadways. In addition, distances to the 70 dBA, 65 dBA, 60 dBA, and 55 dBA noise contours are also presented. Depending on the specific land use type and proximity to roadway segments, applicable noise standards for respective land uses (Table N-1) could be exceeded at new receptors. However, the 2040 General Plan includes policies that address the placement of new noise-sensitive receptors near transportation noise sources. Specifically, Policy N-1.1 requires new development to meet the noise compatibility standards identified in Table N-1. Policy N-1.4 requires that new development located near major noise sources such as roads, conduct a site-specific analysis to ensure applicable noise reduction measures are incorporated and noise standards are met and Policy N-1.2 requires the use of design-related noise reduction measures to achieve interior and exterior noise standards. Nonetheless, provided that specific land use types and their proximity to existing and future traffic noise levels are unknown and the ability of applicable noise attenuation measures (e.g., setbacks, building insulation, sound barriers) to be fully implemented such that acceptable noise levels at future receptors is always achieved is not guaranteed, it is possible that new development located in proximity to existing roads could be exposed to levels that exceed levels in Table N-1.

Railroad and Transit Noise

Placement of new receptors near existing or future planned rail lines could expose people to substantial noise levels, depending on the proximity to rail alignments, the type of rail, and daily frequency of service. Several new and expansions to existing rail services are planned within and near the City that would generate noise and have the potential to affect new sensitive receptors. Specifically, a new planned high-speed rail, Metrolink Gold Line extension, and increase in existing Metrolink service would result in increases in rail noise affecting the City. In addition, a new underground Hyperloop tunnel and a new local circulator that could be a bus, light rail, or underground tunnel extension are also planned. However, because the Hyperloop would be underground, noise would not be an issue and because the local circular's specific technology and alignment are unknown, these services cannot be evaluated at this time.

To evaluate noise exposure levels from new and expanded rail-transit services, railroad noise modeling was conducted for 2040 conditions. Refer to Appendix 5.13-1 for modeling inputs and results. Based on the modeling conducted, future 2040 railroad noise contours were developed, and are summarized below in Table 5.13-9.

		Distance (feet) To Railroad Noise Contour			e Contour
Segment	Railroad Service	75 dBA L _{dn} /CNEL	70 dBA L _{dn} /CNEL	65 dBA L _{dn} /CNEL	60 dBA L _{dn} /CNEL
1	Metrolink Service Increase (existing railroad alignment	69	148	322	725
2	Gold Line Extension	60	129	281	632
3	Brightline (High Speed Rail)	33	63	136	306

Source: Modeling conducted by Ascent Environmental, 2021.

Notes: dba= A-weighted decibels; Ldn/CNEL= day-night average/community noise equivalent level.

To evaluate the potential for noise impacts on new receptors, noise compatibility standards (Table N-1) were applied. Based on the land plan (LC-3) and various land use types included in Table N-1, it is plausible that all land use types could occur within noise contour distances identified in Table 5.13-8. Although it is more likely that higher density uses (e.g., mixed use and high density residential), that have higher allowable noise standards (i.e., 70 dBA) would occur closer to new rail lines, low density residential and City Corridor uses would also be allowed to occur adjacent to the proposed Brightline alignment. Thus, given that specific receptor types and their proximity to existing and future planned rail alignments are unknown, it is possible that new receptors would be located within distances to rail that could expose them to noise levels that exceed the applicable noise standard for the respective land use type.

As discussed above, new development associated with the 2040 General Plan could potentially be in close proximity to existing roadways and existing or future planned railroads. Thus, because specific land use development details are unknown, including land use type and exposure levels, it cannot be guaranteed that noise levels in Table N-1 would always be achievable. This impact would be potentially significant.

Standard conditions of approval 5.13-4a through 5.13-4e require project developers to conduct noise assessments to determine noise compatibility and require site-specific noise attenuation measures including site planning and design measures such as setbacks and building orientation and interior layouts that shield noise from sensitive uses, noise barriers, or appropriate building materials to reduce exterior and interior noise to acceptable levels. However, there may be cases where noise reduction measures are either infeasible or inadequate for reducing traffic noise to less than significant level. That is, site design measures such as setbacks and building orientation are bound by physical constraints of a project site so cannot always be designed to achieve acceptable exterior noise levels. Therefore, because there may be cases where new development could result in exposure to substantial permanent noise (traffic and rail) above standards in Table N-1, this impact would be significant and unavoidable.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.13-4 would be potentially significant.

Mitigation Measures

Implementation of standard conditions of approval 5.13-4a through 5.13-4e.

Level of Significance After Mitigation: Impact 5.13-4 would be significant and unavoidable.

Impact 5.13-5: Future development under the General Plan could generate short-term construction vibration or exposure to new sensitive land uses to long-term operational vibration sources that exceed City thresholds. [Threshold N-5]

Construction-related vibration has the potential to damage structures, cause cosmetic damage (e.g., crack plaster), or disrupt the operation of vibration-sensitive equipment. Vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. Typical construction activities, such as the use of jackhammers, blasting, other high-power or vibratory tools, compactors, and tracked equipment, may generate

substantial vibration near the source. Activities involving pile driving and blasting tend to generate the highest levels of vibration, and thus, these activities tend to result in constructionrelated impacts more frequently than other construction activities (FTA 2018). Among construction activities, pile driving and blasting activities generate the highest levels of disruptive vibration levels. Table 5.13-10 includes reference vibration levels for construction activities that generate the highest levels of vibration. In addition, like construction noise, vibration levels would be variable depending on the type of construction project and related equipment use.

Equipme	ent	Peak Particle Velocity (PPV) at 25 Feet (Inches per Second)	Root Mean Square at 25 Feet (VdB)
Dile Driver (Impact)	Upper Range	1.518	112
Pile Driver (Impact)	Typical	0.644	104
Dile Driver (Cerrie)	Upper Range	0.734	105
Pile Driver (Sonic)	Typical	0.170	93
Vibratory Roller		0.210	95
Blasting		1.130	109
Clam Shovel Drop (Slurry	Wall)	0.202	94
	In Soil	0.008	66
Hydrol Mill (Slurry Wall)	In Rock	0.017	75
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Table 5.13-10 Construction Equipment Vibration Levels

Source: FTA 2018

When evaluating construction-related vibration impacts, the activities with the greatest potential to cause impacts (structural damage or disturbance to sensitive land uses) are the primary focus. As discussed for Impact 5.13-1, specific construction activities, proximity of equipment to structures and sensitive land uses, and specific duration of individual construction projects is not known at this time; thus, this analysis evaluates the potential for impacts to occur at a programmatic level based on typical construction equipment that could be used for building construction. Blasting is generally conducted to remove rock outcroppings and not used for typical building construction or demolition in urban settings. Thus, of the vibration-generating equipment shown above, pile driving is the activity that has

the greatest potential to result in impacts and could potentially be used during construction of new residential, commercial, or other land uses under the 2040 General Plan, as well as infrastructure associated with development. Not all construction activity under the 2040 General Plan would involve pile driving, so in addition, this analysis evaluates vibration levels resulting from construction activities that do not involve pile driving.

When pile driving occurs for building construction, several piles requiring multiple blows could occur in a given day, thus, this analysis conservatively applies the FTA criteria of 65 VdB for frequent events to evaluate vibration impacts. For less frequent activities other than pile driving the 80 VdB threshold was used for disturbance to sensitive receptors and the Caltrans 0.2 PPV in/sec criteria is used to evaluate structural damage.

For construction activities involving pile driving, based on FTA's recommended procedure for applying propagation adjustments to reference levels for a typical pile driver, vibration levels could exceed the threshold of significance for disturbance to a sensitive land use within 500 feet of construction activities and could exceed the threshold of significance for structural damage within 100 feet of construction activities.

For construction activities that would not involve pile driving, a roller or a dozer is generally the equipment that causes the highest vibration levels. Using a reference vibration level for a roller and applying standard propagation adjustments, vibration levels from construction activity without pile driving could exceed the threshold of significance for disturbance to a sensitive land use within 80 feet of construction activities and could exceed the threshold of significance for disturbance for structural damage within 25 feet of construction activities.

The land use plan of the 2040 General Plan would concentrate growth and development within Focus Areas that primarily occur near or within existing developed communities, thus, having the potential to result in vibration near existing sensitive land uses. The City's nighttime construction limitations would avoid vibration-related disturbance during nighttime hours; however, due to the level of anticipated development throughout the City, the lack of specific construction activities and their proximity to sensitive receptors, the possibility remains for construction activities that generate vibration to occur within distances identified above, resulting in disturbance to sensitive land uses or structural damage. This impact would be potentially significant.

Several new and expansions to existing transit services (bus and rail) are planned within and near the City that would generate vibration and have the potential to affect new sensitive receptors developed within the identified Focus Areas. Those include a new planned highspeed rail, Metrolink Gold Line extension, increase in existing Metrolink service, new underground Hyperloop tunnel, new bus-rapid transit (BRT), and a new local circulator that could be a bus, light rail, or underground tunnel extension. For purposes of this analysis, the underground tunnels are excluded as they would not result in vibration impacts to receptors. Placement of new receptors near existing or future planned rail right-of-way could expose people to substantial vibration levels, depending on the proximity to rail alignments and depending on the type of rail and daily frequency of service. To evaluate the potential for vibration impacts, FTA's General Vibration Assessment Impact Criteria were applied (FTA 2018). Regarding transit vibration, it is extremely rare for operations to cause substantial or even minor cosmetic damage to buildings. Further, because this impact addresses exposure to new receptors, newer building construction would not be nearly as susceptible to damage as older structures, thus structural damage to new development from transit operations is not discussed further. This impact focusses on disturbance to sensitive land uses from transit operations that could occur as a result of development that would occur under the land use designations of the 2040 General Plan. In accordance with FTA guidance, screening distances for various rail-transit types, are shown in Table 5.13-11, *Screening Distances for Vibration Assessment*.

	Critical Distance for Land Use Categories* (Distance in feet from Right-of-Way or Property Line)			
Vibration-Generating Transit Use	Category 1	Category 2	Category 3	
Steel-Wheeled/Steel-Rail Vehicle Transi	t Uses			
Conventional Commuter Railroad	600	200	120	
Rail Rapid Transit	600	200	120	
Light Rail Transit	450	150	100	
Intermediate Capacity Transit	200	100	50	
Rubber-Tire Heavy Vehicle Uses				
Rubber-Tire Heavy Vehicle Uses	100	50		

Table 5.13-11	Screening Distances for Vibration Assessment
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Source: Transit Noise and Vibration Impact Assessment, Table 9.2.

Notes:

* Category 1: Buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance. Examples include: concert halls; vibration-sensitive research and manufacturing; hospitals with vibration- sensitive equipment; and university research operations.

Category 2: All residential land uses and any buildings where people sleep, such as hotels and hospitals.

Category 3: Schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

For the purposes of screening procedures, concert halls and television studios should be evaluated as Category 1, and theaters and auditoriums should be evaluated as Category 2.

The 2040 General Plan's Vision Diagram (Figure LC-1) depicts the desired outcome of land use development for the future of the City, focusing development within Community Activity Nodes, that also generally are oriented near Mobility Corridors. As a result, new development, including residential, commercial, and office uses, would likely be located within FTA screening levels for various transit types (Table 5.13-11). Due to the programmatic nature of this analysis, specific distances from transit types to specific uses cannot be determined at this time because project-specific details about development under the 2040 General Plan, such as building location, materials, and soil conditions are unknown at this time. Thus, this analysis assumes that new sensitive land uses (all uses contained in FTA's Category 1 and 2) proposed within 600 feet of existing or new rail and 100 feet of existing or new bus service, could result in excessive vibration levels at new development. This impact would be potentially significant.

Implementation of standard condition of approval 5.13-5a would require that vibrationgenerating construction activities do not occur during sensitive times of the day (i.e., late evening through early morning). Through additional measures, the City would require project proponents to minimize vibration exposure to nearby receptors by maximizing the distance between equipment and receptors, phasing operations, and predrilling holes for potential piles. These vibration control measures would result in compliance with vibration threshold levels established to prevent structural damage. However, while these measures would substantially lessen human annoyance resulting from vibration levels, at this programmatic level of analysis it is not possible to conclude that vibration levels in all locations associated with all future development under the 2040 General Plan would be reduced below human annoyance levels; there could be future development that results in vibration levels that cause human annoyance.

Implementation of standard conditions of approval 5.13-5b and 5.13-5c, which require projectspecific vibration analyses to evaluate vibration exposure from nearby transit sources and evaluation of potential vibration impacts from new transit projects, would ensure that new sensitive receptors located in proximity to transit vibration sources would be adequately evaluated for vibration exposure; these standard conditions of approval would routinely result in vibration exposure levels that do not exceed threshold values. However, because exact rail locations and technologies, including specific receptor type and proximity to transit is unknown, it cannot be determined whether new development would achieve acceptable vibration levels in all locations. As a result, this impact would be significant and unavoidable.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.13-5 would be potentially significant.

Mitigation Measures

Implementation of standard conditions of approval 5.13-5a through 5.13-5c.

Level of Significance After Mitigation: Impact 5.13-5 would be significant and unavoidable.

5.13.5 CUMULATIVE IMPACTS

Implementation of the General Plan would result in population and employment growth over the planned buildout period. This growth would result in increased roadway traffic volumes and associated noise levels for major arterial and collector roadways throughout the Planning Area. Cumulative development conditions would result in increased cumulative roadway noise levels. No stationary or non-transportation noise sources were identified in the surrounding area of the Planning Area that would have a cumulative impact on noise-sensitive land uses in the City. Therefore, the primary factor for cumulative impact analysis is the consideration of future roadway traffic noise levels.

Predicted future cumulative transportation noise levels are projected to exceed the City's noise standards. This is considered a significant cumulative impact. While traffic volumes would likely increase irrespective of implementation the General Plan, the proposed project would introduce future development that would contribute to cumulative traffic volumes and traffic

noise levels along roadways in the City would exceed the City's applicable noise standards for traffic noise as well as contribute to substantial increases in traffic noise levels along roadways that already currently exceed the City's noise level standards. These noise levels represent the existing plus project condition. The cumulative condition would include this noise and any traffic noise resulting from growth outside of the City and would still exceed the City's noise level standards. Consequently, the proposed project's contribution would be cumulatively considerable. Implementation of standard conditions of approval identified above would reduce the project's contribution to cumulative noise and vibration impacts, but not to a level that is less than significant.

5.13.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impacts would be **potentially significant**:

- Impact 5.13-1 Construction activities would result in temporary noise increases.
- Impact 5.13-2 Generation of permanent increase in traffic noise at noise-sensitive land uses.
- Impact 5.13-3 Generation of substantial permanent increase in stationary noise at noise-sensitive land uses.
- Impact 5.13-4 Expose new sensitive land uses to noise levels.
- Impact 5.13-5 Generation of short-term construction vibration and long-term operational vibration
- **Cumulative** The proposed project could contribute to cumulative noise impacts.

5.13.7 MITIGATION MEASURES

No feasible mitigation measures.

5.13.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact 5.13-1

Implementation of standard condition of approval 5.13-1 would avoid or substantially lessen potential sleep disturbance associated with nighttime construction noise and avoid or substantially lessen noise levels at properties adjacent to construction sites. However, while available construction noise attenuation measures (e.g., temporary walls, mufflers) can typically achieve a maximum of 10 dB noise reduction, that may not be adequate to achieve noise standards depending on the proximity of construction activities to nearby land uses. Therefore, this impact would be significant and unavoidable.

Impact 5.13-2

Implementation of standard condition of approval 5.13-2 requires discretionary development to implement noise reduction measures to conduct noise assessments and reduce projectgenerated noise, based on site-specific recommendations and available noise attenuation measures. This measure would routinely avoid exposure of sensitive receptors to substantial permanent traffic noise levels. However, there may be cases where noise reduction measures are either infeasible or inadequate for reducing traffic noise to less than significant level. Therefore, this impact would be significant and unavoidable.

Impact 5.13-3

Implementation of standard condition of approval 5.13-3 requires new discretionary development projects that contain new stationary noise sources to undergo a site-specific noise evaluation that would require proper noise-attenuating measures, such that applicable daytime (i.e., 65 dba L_{eq} exterior, 50 dBA L_{eq} interior) and nighttime (i.e., 60 dBA L_{eq} exterior, 45 dBA L_{eq} interior) noise levels would be achieved. This impact would be reduced to less than significant.

Impact 5.13-4

Standard conditions of approval 5.13-4a through 5.13-4f would require development to conduct noise assessments to determine noise compatibility. Site-specific noise attenuation measures identified in those assessments would typically reduce exterior and interior noise to acceptable levels. However, there may be cases where noise reduction measures are either infeasible or inadequate for reducing noise to less than significant level. Therefore, because there may be cases where new development could result in exposure to substantial permanent noise (traffic and rail) above standards in Table N-1, this impact would be significant and unavoidable.

Impact 5.13-5

Standard conditions of approval 5.13-5a through 5.13-5c would require that vibrationgenerating construction activities do not occur during sensitive times of the day (i.e., late evening through early morning) and new sensitive receptors located in proximity to transit vibration sources would be adequately evaluated for vibration exposure. While these standard conditions of approval would substantially lessen human annoyance from vibration levels, at the programmatic level of analysis it is not possible to conclude that vibration levels in all locations associated with all future development under the 2040 General Plan would be reduced below human annoyance levels. As a result, this impact would be significant and unavoidable.

5.13.9 REFERENCES

Ascent Environmental. 2020, May. Noise and Vibration Existing Conditions. Appendix 2-1.

_____. 2021, June. Noise And Vibration Technical Memorandum. Appendix 5.13-1.

5.14 POPULATION, HOUSING, AND EMPLOYMENT

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential environmental effects on population, employment, and housing associated with implementation of the General Plan update. The analysis includes a review of the potential to induce population growth and the potential for displacement of people or housing.

Chapter Overview

Buildout of the proposed General Plan would increase the population in the city and add employment opportunities; however, the proposed General Plan would be within the population and employment projections in SCAG's RTP/SCS growth forecasts. Development under the proposed General Plan would not displace housing within the city. Further, the intent of the proposed General Plan is to provide infill development without expanding the boundaries of the city. Development under the General Plan would be balanced to include employment opportunities as well as residential options for residents at various income levels. By providing both housing and employment, the proposed General Plan would maintain a jobs-to-housing balance similar to current conditions. Impacts associated with population, housing, and employment would be less than significant.

Heart of the Matter

The General Plan expects there to be more people living and working in the City of Rancho Cucamonga. What makes this plan different from its predecessors, is that little to no expansion of the city boundaries is needed to add residents or jobs. The intent of the land use pattern is to intensify development along corridors where services exist today or will be added in the future. In this fashion, the General Plan emphasizes infill along major corridors and transit routes over expansion of the city boundaries. Job creation is prioritized to help reduce the commute culture for city residents. From both a planning and environmental perspective, making efficient use of existing developed land is a benefit to the environment and aligns with local and statewide goals to reduce vehicle miles travelled. Making efficient use of existing developed land developed spaces with a thriving population who will live, work, and play in the city. This approach also respects the existing developed neighborhoods by directing most of the population and employment growth away from them and into areas best suited to accept it.

5.14.1 ENVIRONMENTAL SETTING

5.14.1.1 Regulatory Background

State Regulations

California Government Code

California Government Code Section 65300 describes the scope and authority of local jurisdictions to prepare, adopt, and amend general plans. Communities prepare general plans to guide the long-term physical development of the jurisdiction and any land within the jurisdiction's sphere of influence. At a minimum, the California Government Code requires general plans to address land use, circulation, housing, noise, conservation, open space, and safety issues.

Additionally, the California Government Code assigns equal importance to each general plan element and requires general plan elements to be internally and externally consistent, meaning that policies between elements should not be in conflict with one another, nor should subsequent plans or implementation programs, such as the zoning ordinance, capital improvement plan, or specific plans, conflict with general plan policies.

The housing portion of the general plan is expected to analyze existing and protected housing needs, examine special housing needs, evaluate the effectiveness of current goals and policies, identify constraints to providing affordable housing, identify land available in the jurisdiction to accommodate the jurisdiction's share of the regional housing need, and identify opportunities to incorporate energy and conservation measures into the housing stock. The housing element is the only portion of the general plan that has a statutory requirement to be reviewed and certified by a state agency and must be updated within a specified time period on a 4- or 8-year cycle. (See Chapter 5 of Volume 2)

California Health and Safety Code

In addition to the regulations set forth in the California Government Code, provisions related to housing and local policy are set forth in the California Health and Safety Code under Division 13, Housing, and Division 24, Community Development and Housing. Division 13 provides rules and regulations related to employee housing, manufactured housing, mobile home parks, elderly housing, access for physically handicapped persons, and building standards for new, existing, and historic structures to ensure the health, safety, and welfare of all California residents.

Regional Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the metropolitan planning organization (MPO) that represents 6 counties and 191 cities in Southern California. As the MPO for the region, SCAG is responsible for analyzing the region's transportation system, the future of growth in the region, and potential funding sources to address housing, transportation, and livability issues for the 18 million residents that call Southern California home.

As part of the Regional Transportation Planning (RTP) process that occurs every 4 years, SCAG is responsible for determining the growth in housing, employment, and population across the region and for identifying efficient and effective methods to accommodate that growth. SCAG estimates that by 2035, the region will add more than 4 million residents, primarily in Riverside and San Bernardino counties. As the agency charged with identifying population, housing, and employment projections and trends, SCAG also leads the Regional Housing Needs Allocation (RHNA) process to identify the amount of growth, at a variety of income levels, that each jurisdiction in the region will need to accommodate within the housing element planning period and assist jurisdictions in analyzing the existing and future housing needs of their community.

Local Regulations

Rancho Cucamonga Municipal Code

Article III, Zoning Districts, Allowed Uses, and Development Standards, of Title 17 Development Code, of the Rancho Cucamonga Municipal Code serves as the implementation component of the General Plan to ensure the orderly development of the city and to protect, promote, and enhance the public health, safety, and general welfare. The Zoning Ordinance establishes standards and procedures for development in each zoning district including height, setback, housing density, yard, parking, walls, landscaping, and land use standards.

Standard Conditions of Approval

There are no existing regulations that reduce impacts on population and housing.

5.14.1.2 Existing Conditions

Historic population

Table 14-1 shows population growth in the city for the past twenty years as estimated by the State Demographic Research Unit. Over the twenty-year period from 2000 to 2020, the city population increased by 1.60 percent annually. The percentage of growth slowed when calculated at ten- and five-year averages, with an average growth of 0.60 and 0.25 percent respectively. Vacancy rates increased over the same period while the persons per unit stayed relatively constant.

In 2000, the ratio of single family to multiple family homes was approximately 79 percent to 21 percent. By 2020, the ratio of multiple family homes had increased to 29 percent as multiple family development outpaced single family development.

Year	Total Population	Total Housing Units	Single Family	Multiple Family	Vacancy	Persons Per Unit
2000	127,743	42,134	33,124	9,010	3.02%	3.037
2005	156,854	50,993	38,213	12,780	3.51%	3.119
2010	165,269	56,618	40,363	16,255	3.95%	2.982
2015	173,346	58,575	41,559	17,016	3.91%	3.028
2020	175,522	59,440	42,407	17,033	4.02%	3.026

Table 5.14-1	Rancho Cucamonga Historic Population Estimates 2000 - 2020
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Source: California Department of Finance E-4 Historical Population and Housing Estimates for Cities, Counties, and the State 2000-2021

Historic Employment

Prior to the COVID-19 pandemic, the U.S. Census estimated that Rancho Cucamonga had approximately 82,000 jobs. There were approximately 76,000 employed residents in Rancho Cucamonga, for a ratio of 1.08 jobs per employed resident. Before the shelter-in-place measures only 15 percent of the city's residents were able to work in the city with the remaining 85 percent commuting to nearby communities or to employment centers in Downtown Los Angeles, San Bernardino, or Orange County. Workers employed in Rancho Cucamonga commute into the city from a variety of locations, including nearby cities, Los Angeles, Orange County, and the Victor Valley. The city's freeway access and rail facilitate connections with the broader region, largely from areas to the east and north with lower housing costs. According to stakeholder interviews conducted for the General Plan Update, the lengthy commutes from the east and northern regions of the Inland Empire is partially a result of the cost of housing in Rancho Cucamonga compared to other locations. The background report for the General Plan notes that the lasting impact of COVID-19 may be a significant reduction in both inbound and outbound commuting for the foreseeable future. Recent layoffs and furloughs, as well as employed people newly working from home, have drastically curtailed commute volumes in and out of Rancho Cucamonga. Even as the local economy recovers and begins to restore and add jobs, some of this reduction in commuting may last over the medium- to long-term as remote working, shopping, and business transactions are increasingly normalized.

Jobs Located in Rancho Cucamonga	81,718
Homes in 2017 per DOF	59,188
Employed Residents in Rancho Cucamonga	75,951
Jobs / Employed Resident	1.08
Jobs/Housing	1.38
Share of Residents Also Working in Rancho Cucamonga 15%	

Table 5.14-2 Rancho Cucamonga Employment Overview, 2017 (Pre-COVID-19)

Sources: US Census Longitudinal Employer-Household Dynamics, 2017; Strategic Economics, 2020.

As shown in Table 5.14-3, approximately 12 percent of all jobs are in the manufacturing sector; however, national trends are forecasting low employment growth in manufacturing due to a higher degree of automation and global competition. The number of manufacturing firms in Rancho Cucamonga dropped from 239 in 2011 to 230 in 2017, according to estimates from County Business Patterns.

Currently wholesale trade and logistics jobs account for about 11 percent of total citywide employment. Although it is not a major office center, 14 percent of employment in Rancho Cucamonga is in knowledge-based industries. Prior to COVID-19, there was significant hotel employment due to the proximity of nearby Ontario International Airport, as well as approximately 10 percent of jobs in retail spread among the city's several retail clusters.

Industry Sector	Numbers of Employees	Share of Employment
Production, Distribution & Repair	24,958	30.5%
Manufacturing	10,145	12.4%
Construction	5,954	7.3%
Transportation and Warehousing	4,481	5.5%
Wholesale Trade	4,378	5.4%
Knowledge-Based	11,121	13.6%
Finance and Insurance	5,213	6.4%
Professional, Scientific, and Technical Services	3,312	4.1%
Real Estate and Rental and Leasing	1,268	1.6%
Management of Companies and Enterprises	870	1.1%
Information	458	0.6%
Dining, Accommodations & Entertainment	10,821	13.2%
Accommodation and Food Services	10,135	12.4%
Arts, Entertainment, and Recreation	686	0.8%
Retail Trade	8,098	9.9%
Health Care and Social Assistance	7,516	9.2%
Educational Services	6,359	7.8 %
Public Administration	1,698	2.1%
Other	11,129	13.6%
Administration & Support, Waste Management and Remediation	7,972	9.8%
Other Services (excluding Public Administration)	2,119	2.6%
Utilities	1,038	1.3%
Agriculture, Forestry, Fishing and Hunting	18	0.0%
Total	81,718	

Table 5.14-3 Employment in Rancho Cucamonga by Industry Category and Sector, 2017

Sources: US Census Longitudinal Employer-Household Dynamics, 2017; Strategic Economics, 2020.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) undertakes comprehensive regional planning with an emphasis on transportation, producing a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2016–2040 RTP/SCS provides projections of population, households, and total employment for both the City of Rancho Cucamonga and San Bernardino County. Based on the city's share of California's and the region's employment growth, migration and immigration trends, and birth rates, SCAG projects the population, housing, and employment will grow at an average annual rate of 0.76, 1.24, and 1.21 percent, respectively. These projections are summarized in Table 5.14-4, SCAG Growth Projections for the City of Rancho Cucamonga and San Bernardino County.

Calculated Annual Growth Rate 0.76%	20 SCAG w/ DOF 2020	Total Units	Single Family	Other Residential	Planning Period Buildout 1.43%	Total Units	Single Family	Other Residential
Year	Population				Population			
2020	175,522	59,440	42,407	17,033	175,522	59,44 0	42,407	17,033
2025	182,313	2,380	1,602	778	188,420	4,521	3,041	1,480
2030	189,366	2,471	1,663	808	202,266	4,853	3,266	1,587
2035	196,691	2,567	1,727	840	217,130	5,209	3,505	1,704
2040	204,300	2,666	1,794	872	233,088	5,592	3,762	1,830
Total New	28,778	10,084	6,786	3,298	57,566	20,175	13,574	6,601
Grand Total	204,300	69,524	49,193	20,331	233,088	79,615	55,981	23,634

 Table 5.14-4
 Population and Employment Growth Projections 2012 - 2040

Source: SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction, Growth Assumption Memorandum, Appendix 5-14-1.

The ratio of jobs to housing is a means of determining the general economic health of a region. SCAG applies the job-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and infrastructure. A focus of SCAG's regional planning efforts has been to improve this balance; however, job-housing goals and ratios are only advisory. There is no ideal job-housing ratio adopted in state, regional, or city policies. The Environmental Protection Agency considers a jobs housing ratio in the range of 0.75 to 1.5 to beneficial to reducing vehicle miles travelled. (EPA, 2014) Table 5.14-5 shows the existing and projected jobs-housing balance.

Scenario	Year	Households	Jobs	Ratio of Jobs to Homes
Existing	2020	59,440	85,379	1.44
No Project	2040	73,355	90,087	1.64
Plus Project	2040	86,480	107,036	1.57

Table 5.14-5 Ratio of Jobs to Households, 2020 and 2040

5.14.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- P-1 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- P-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

5.14.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant policies of the Rancho Cucamonga General Plan Update, which may reduce potential impacts on population and housing because of implementation of the proposed project.

Land Use and Community Character Element

- **GOAL LC-2 HUMAN SCALED.** A city planned and designed for people fostering social and economic interaction, an active and vital public realm, and high levels of public safety and comfort.
- LC-2.5 Gradual Transitions. Where adjacent to existing and planned residential housing, require that new development of a larger form or intensity, transition gradually to a complement the adjacent residential uses.
- **GOAL LC-4 COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- **LC-4.1 Neighborhood Preservation.** Preserve and enhance the character of existing residential neighborhoods.
- LC-4.2 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining residential or commercial development and provide for future connections into any adjoining vacant parcels.
- LC-4.3 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well-structured such that the physical layout, and land use mix promote walking to services, biking and transit use, and have the following characteristics.
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.

•	Be organized in relation to one or more focal activity centers, such as a
	park, school, civic building, or neighborhood retail, such that most
	homes are no further than one-quarter mile.

- Require development patterns such that 60 percent of dwelling units are within 1/2-mile walking distance to neighborhood goods and services.
- Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context.
- Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.4 Balanced Neighborhoods. Within the density ranges and housing types defined in this General Plan, promote a range of housing and price levels within each neighborhood to accommodate diverse ages and incomes.
- LC-4.5 Equitable Housing Opportunities and Diversity of Housing Types. Within the density ranges and housing types defined in this General Plan, promote a diversity of land tenure opportunities to provide a range of choices on the types of property estate available and ready access to an equitable array of opportunities at a variety of price points. For projects five acres or larger, require that diverse housing types be provided and intermixed rather than segregated by dwelling type.
- LC-4.6 Block Length. Require new neighborhoods to be designed with blocks no longer than 600 feet nor a perimeter exceeding 1,800 feet. Exceptions can be made if mid-block pedestrian and bicycle connections are provided, or if the neighborhood is on the edge of town and is intended to have a rural or semi-rural design character.
- LC-4.7 Intersection Density. Require new neighborhoods to provide high levels of intersection density. Neighborhood Center and Semi-Rural Neighborhoods should provide approximately 400 intersections per square mile. Suburban Neighborhoods should provide at least 200 intersections per square mile.
- LC-4.8 Solar Orientation. Street, block, and lot layouts should orient a majority of lots within 20 degrees of a north-south orientation for increased energy conservation.
- LC-4.9 Minimize Curb Cuts. Require new commercial development, and residential to the extent possible, to have common driveways and/or service lanes and alleys serving multiple units, to minimize the number of curb cuts along any given block to improve pedestrian safety.
- LC-4.10Neighborhood Transitions. Require that new neighborhoods provide
appropriate transitions in scale, building type and density between different
General Plan designations, Place Types and Community Planning Areas.

- LC-4.11 Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building and housing types, and lack of walking or biking access to parks, schools, goods, and services.
- LC-4.12 Neighborhood Edges. Encourage neighborhood edges along street corridors to be characterized by active frontages, whether single-family or multifamily residential, or by ground floor, neighborhood-service nonresidential uses. Where this is not possible due to existing development patterns or envisioned streetscape character, neighborhood edges shall be designed based on the following policies:
 - Strongly discourage the construction of new gated communities except in Semi-Rural Neighborhoods.
 - Allow the use of sound walls to buffer new Neighborhoods from existing sources of noise pollution such as railroads and limited access roadways.
 - Prohibit the use of sound walls to buffer residential areas from arterial or collector streets. Instead design approaches such as building setbacks, landscaping and other techniques shall be used.
 - In the case where sound walls might be acceptable, require pedestrian access points to improve access from the Neighborhoods to nearby commercial, educational, and recreational amenities, activity centers and transit stops.
 - Discourage the use of signs to distinguish one residential project from another. Strive for neighborhoods to blend seamlessly into one another. If provided, gateways should be landmarks and urban design focal points, not advertisements for home builders.
- **GOAL LC-5 CONNECTED CORRIDORS.** A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.
- LC-5.4 Multi-Family Development. Focus new multifamily housing development along corridors between commercial nodes and centers and ensure that it is well-connected to adjoining neighborhoods and centers by high quality walking and biking routes.
- **GOAL LC-6 ACTIVE CENTERS.** A variety of commercial and mixed-use centers throughout the city, which bring a range of opportunities for shopping, dining, recreations, commerce, employment, arts and culture within easy reach of all neighborhoods.
- LC-6.3 Evolving Centers. Encourage the improvement of existing commercial centers to provide more active, human scale environments and community gathering places, including the potential for infill housing and office use.

Housing Element

- **GOAL H-1 HOUSING OPPORTUNITIES.** A diverse community with a broad range of housing types and opportunities to accommodate expected new households.
- H-1.1 RHNA Requirement. Encourage the development of a wide range of housing options, types, and prices that will enable the City to achieve its share of the RHNA.
- H-1.2 Elderly and Disabled Household Needs. Recognize the unique characteristics of elderly and disabled households and address their special needs.
- H-1.3 Accessory Dwelling Units. Facilitate the development of accessory dwelling units to provide additional housing opportunities pursuant to State law and established zoning regulations.
- **GOAL H-2 AFFORDABLE HOUSING.** A city where housing opportunities meet the needs of all socioeconomic segments of the community.
- H-2.1 Rental Assistance Programs. Encourage the use of rental assistance programs to assist lower income households and support the Housing Authority of the County of San Bernardino (HACSB) applications for additional vouchers to meet the needs of lower income households.
- **H-2.2 Mobile Home Park Accord.** Support the Mobile Home Park Accord voluntary rent stabilization as a means of keeping rents at reasonable levels.
- **GOAL H-3 HOMELESSNESS.** A compassionate community with a wide range of options and support for the housing insecure and those experiencing homelessness.
- H-3.1 Homeless Services. Provide assistance as it becomes available towards efforts of local organizations and community groups to provide emergency shelters, transitional housing opportunities, and services to the city's homeless population and those at-risk of homelessness.
- **H-3.2 Homeless Programs.** Participate with adjacent communities toward the provision of a sub-regional shelter program and encourage the County to develop a comprehensive homeless program.

5.14.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.14-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). [Threshold P-1]

Table 5.14-4 projects the planning period buildout 2040 population to be 233,088. This is higher than the SCAG projection of 203,400. As shown in Figure 1-1 Degrees of Change Map in Volume 1, Vision & Core Values, this General Plan Update focuses change along major transportation corridors and in areas of the City already planned for growth. The General Plan provides for an increase in population in the focus areas of the city to take advantage of employment opportunities as well as existing and planned transit. This approach to focusing growth in planned areas is intentional in the Plan to minimize a pattern of population growth dispersed throughout the city. None of the focus areas described in Figure F-1 of Volume 2, Built Environment are at the periphery of the City, or anticipated to affect adjacent lands not already designated for development by the city or adjacent agencies.

The General Plan Update is planning for growth in the city and anticipates that growth over the planning period will be higher than the 2016 projection provided by SCAG. The SCAG estimate, as shown in Table 5.14-4, projects a 2040 population of 204,300 for an annual growth rate of approximately 0.81 percent. (The growth rate drops slightly to 0.76 percent if the DOF 2020 population of 175,522 is used as the starting point for the projection.) Development projection for the city, as shown in Table 3-2: Land Use Development Projections by Focus area and Remainder of City of Buildout in Chapter 3: Project Description, projects a 2040 population of 233,088 for an average annual growth rate of 1.43 percent, approximately 0.62 percent higher than the SCAG projection.

Table 5.14-6 shows the growth potential of the proposed General Plan that was used in the air quality and greenhouse gas analysis in this EIR. The planning period buildout calculations in Table 5.14-6 reflect a 50-percent reduction in the theoretical development potential for each land use due to several factors, such as the following. Not all property owners will want to develop. Some development may not occur until later in the planning period due to necessary preconditions, such as the development of high-speed rail. There might be other existing development or physical constraints on individual sites that have not been considered.

Land Use	Unit	Existing	No Project	Proposed Project
Single-Family Residential	Population	119,830	120,188	127,002
Multi-Family Residential	Population	56,499	76,371	106,893
Residential Total	Population	176,329	196,559	233,088
Retail / Commercial	Jobs	24,960	28,190	31,762
Office	Jobs	17,334	20,867	27,067

Table 5.14-6 Buildout Projections From Proposed Land Use Plan

Land Use	Unit	Existing	No Project	Proposed Project
Industrial / Flex	Jobs	21,837	19,782	26,959
Arts, Entertainment, Recreation	Jobs	6,821	7,136	7,016
Agricultural	Jobs	226	272	226
Public / Institutional	Jobs	18,539	27,150	18,334
Non-Residential Total	Jobs	89,717	103,397	111,363

The RTP/SCS and associated growth projections were prepared prior to the COVID pandemic, and the recent RHNA assigned as part of the sixth cycle housing element. As such, the projections do not reflect changes in market condition.

5.14.4.1 Employment

The current jobs to housing ratio for the city is 1.44 as shown in Table 5.14-5, the rate of employed resident to job is 1.08, and nearly 85 percent of the residents commute outside of the city for employment. The low ratio results in lengthy commutes and adds to the high vehicle miles travelled estimate for the city. Based on the anticipated nonresidential growth, Table 3-2 of chapter 3.0 Project Description projects that approximately 21,647 jobs would be generated at buildout, which is slightly higher than the 19,221 jobs projected by SCAG for 2040 in the RTP/SCS. The proposed General Plan includes policies like MA-5.1 that promotes land uses designed to reduce VMT, and several land use designations specifically intended to create jobs. By increasing the number of jobs within the city, and providing development that includes both housing and employment, the city would maintain both a healthy jobs housing balance and provide opportunities for residents to live and work within the city.

The General Plan Update accommodates future growth in the city by providing for infrastructure and public services to accommodate the projected growth. Proposed policies under the General Plan Update's Community Development Element also ensure that the city provides adequate housing choices for various income levels. By focusing development in areas of the existing general plan that are designated for intense growth, the General Plan Update would not directly or indirectly result in substantial unplanned population growth in the area. Implementation of the proposed project would result in a less than significant impact relating to population growth.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.14-1 would be less than significant.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation: Impact 5.14-1 would be less than significant.

Impact 5.14-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. [Threshold PH-2]

Government Code Section 66300(d)(2) requires that any project that would demolish residential units must create at least as many units as will be demolished. As shown in Table 3-2, the planning period buildout projects approximately 25,685 new dwelling units. The combination of adding residential uses to existing non-residential land use designations and focusing growth in areas of the city that do not have high concentration of housing, and avoiding existing, established neighborhoods, reduces the potential to displace substantial numbers of people or housing. As a result, new development in the city would not displace substantial numbers of existing people or housing, and the impact would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.14-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.14-2 would be less than significant.

5.14.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the region covered by SCAG. As discussed in Impact 5.14-1, development under the proposed General Plan would not displace housing within the city. Because the City of Rancho Cucamonga has no control over development in other areas in the region, it would not contribute to the displacement of housing on other sites within the region. In addition, as discussed above, the proposed General Plan would be within the population and employment projections in SCAG's RTP/SCS growth forecasts. Further, the intent of the proposed General Plan is to rely on infill development for projected growth rather than annexation of land for development. The projected change in jobs/housing balance is intended to encourage the creation of jobs for more of the city's residents who currently commute elsewhere for employment. Development under the General Plan would be balanced to include employment opportunities as well as residential options for residents at various income levels. By providing both housing and employment and maintaining a jobs housing balance better than current conditions, the proposed General Plan would not combine with other projects in the region to directly or indirectly to result in a cumulatively considerable contribution to induced growth in the region. The project's impact would, therefore be less than significant.

5.14.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant.

5.14.7 MITIGATION MEASURES

No mitigation is required.

5.14.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant.

5.14.9 **REFERENCES**

- California Department of Finance E-4 Historical Population and Housing Estimates for Cities, Counties, and the State 2000-2021
- SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction, Growth Assumption Memorandum, Appendix 5-14-1.

US Census Longitudinal Employer-Household Dynamics, 2017; Strategic Economics, 2020.

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5.15 PUBLIC SERVICES

This section addresses the proposed General Plan's impacts to public services providing fire protection and emergency services, police protection, school services, and library services in the city of Rancho Cucamonga and its sphere of influence (SOI). Park services are addressed in Section 5.16, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.19, *Utilities and Service Systems*.

Chapter Overview

Implementation of the proposed General Plan Update would increase the demand for public services including fire protection and emergency services, police protection, school services, and library services in Rancho Cucamonga.

This chapter concluded that the introduction of new structures and additional residents to the city would increase the demand for fire and police protection services. The potential for structural fires would increase due to the addition of more structures at buildout of the General Plan Update, increasing the demand for fire protection services and resources such as staff and equipment. Additionally, due to the increase of new development and additional residents to the city, implementation of the General Plan Update would result in the demand for new law enforcement officers to maintain the current level of service. This increase in demand for police services would be met through the hiring of additional staff, as needed. Implementation of General Plan policies would require future projects to be reviewed by the City and to comply with all applicable requirements prior to the issuance of building permits in order to ensure the safety of each future project.

This chapter concluded that implementation of the proposed General Plan Update would increase the elementary and middle school population in Rancho Cucamonga over the buildout period due to the anticipated increase of residents in the city. However, it is reasonable to assume that schools in the city could accommodate the increase in students without the need to construct new schools. An increase in residents under the General Plan Update would also increase the demand for library services, which would be met through implementation of goals and policies in the Public Facilities and Infrastructure chapter of the General Plan Update.

Heart of the Matter

The public facilities and services provided in Rancho Cucamonga are a matter of community pride and serve the needs of the people. The City invests in the future through the development of public facilities and the services it can offer to the community, and the General Plan Update ensures that future growth does not negatively affect these facilities or reduce services. The City manages a comprehensive range of community facilities to meet the varied needs of residents, including educational and civic amenities that are easily accessible in each neighborhood and each employment district.

Fire protection and emergency services are provided by the Rancho Cucamonga Fire Protection District, and law enforcement services are contracted to the San Bernardino County Sheriff's Department. Rancho Cucamonga has four elementary school districts, one high school district, and numerous private schools that serve the residents. In addition, Chaffey Community College serves the Rancho Cucamonga community and surrounding region and is accredited by the Western Association of Schools and Colleges. The Rancho Cucamonga Public Library, established in 1994, includes two library facilities. In addition to the circulation and processing of library materials, the City's Library Services Department is responsible for children's services, programs, and special events; adult information services; and adult and family literacy services.

5.15.1 FIRE PROTECTION AND EMERGENCY SERVICES

5.15.1.1 Environmental Setting

Regulatory Background

International Fire Code

The International Fire Code (IFC) is a model code for regulating minimum fire-safety requirements for new and existing buildings, facilities, storage, and processes. The IFC includes general and specialized technical fire- and life-safety regulations, with topics addressing fire-department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, use and storage of hazardous materials, protection of emergency responders, industrial processes, and various other topics. The IFC is issued by the International Code Council, which is an international organization of building officials.

Federal Fire Prevention Plans

Fire prevention plans are required under OSHA Standard 1926.24. The purpose of the fire prevention plan is to prevent a fire from occurring in a workplace. It describes the fuel sources (hazardous or other materials) on-site that could initiate or contribute both to the spread of a fire. A fire prevention plan must be in writing, kept in the workplace, and made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees. At a minimum, a Fire Prevention Plan must include:

- A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard.
- Procedures to control accumulations of flammable and combustible waste materials.
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials.
- The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires.
- The name or job title of employees responsible for the control of fuel source hazards.

An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed. An employer must also review with each employee the parts of the fire prevention plan necessary for self-protection (Ball 2021).

State Regulations

California Government Code

Section 65302 of the California Government Code requires general plans to include a safety element, which must include an assessment of wildland and urban fire hazards. The Safety Chapter in the proposed General Plan satisfies this requirement.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC; California Code of Regulations, Title 24, Part 2). The CBC is based on the International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code (CFC; California Code of Regulations, Title 24, Part 9) is based on the 2015 International Fire Code and includes amendments for California fully integrated into the code. The California Fire Code contains fire safety-related building standards that are referenced in other parts of Title 24 of the California Code of Regulations. The CFC is updated once every three years. The 2019 CFC went into effect on January 1, 2020.

California Health and Safety Code

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Fire Plan

The California Fire Plan is the State's "road map" for reducing the risk of wildfire. The overall goal of the plan is to reduce total costs and losses from wildland fire in California through focused, prefire management prescriptions and increased initial attack success. The current plan was finalized in early 2010 and provides guidance to local jurisdictions in meeting State goals.

Local Regulations

Fire Protection District Standard and Guidance Documents

The Rancho Cucamonga Fire District Standards provide interpretation and explanations for the California Fire Code. Because conditions are not the same in every city or community, the State's fire code anticipates the need for local interpretations and applications. The standards documents include Fire Apparatus Access Roads (05-1), Fire Protection Water Supplies (05-10), Fire Sprinkler Systems (09-5), High Piled Combustible Storage (32-1), and the Wildland-Urban Interface Fire Area (49-1) (Ball 2021).

Rancho Cucamonga Fire Protection District: Fire Prevention Bureau

The Prevention Bureau is committed to business safety and resiliency and works collaboratively with the Fire District's Emergency Management program, ReadyRC, to offer additional resources and training for disaster resiliency.

High Hazard Inspection Program

Many businesses and facilities are hazardous simply as a result of the normal business operations in a building. The high hazard inspection program provides routine inspections that require compliance with the Fire Code and environmental protection regulations.

Commercial and Retail Small Business Assessments

Small businesses are the foundation of the US economy and provide nearly 50 percent of the entire productivity in the nation. The Fire District provides no-cost safety assessments for small businesses to help them prevent operational disruptions that can permanently harm their viability.

Fire Extinguishers

The Fire District offers classroom and hands-on training for businesses so employees can learn how to use a fire extinguisher. A 30-minute classroom presentation will teach employees the basics of fire behavior as well as when and how to properly use a fire extinguisher.

Standard Conditions of Approval

There are no existing regulations that reduce impacts to fire protection services and facilities.

Existing Conditions

Fire protection and prevention, emergency medical, rescue, and hazardous materials response services are provided by the Rancho Cucamonga Fire Protection District (Fire District). The Fire District employs approximately 120 full- and part-time employees, including 98 firefighters, who provide fire protection, emergency medical response services, fire prevention and inspection services, and emergency management functions to more than 177,000 residents over a span of approximately 50 square miles in and around the city limits. Fire, rescue, emergency medical service, and hazardous materials incidents are coordinated through an on-duty battalion chief supervising cross-trained firefighter/paramedics and firefighter/emergency medical technicians who respond from seven fire stations throughout the city. Table 5.15-1 provides a description of each of the seven fire stations, and Figure 5.15-1, *Rancho Cucamonga Fire District Station Map*, graphically depicts the locations.

Station	Address	Equipment
Amethyst Station #171	6627 Amethyst Avenue	Medic Engine 171 and Brush Engine 171
Public Safety Facility/ Station #172	9612 San Bernardino Road	Medic Engine 172. This is a public safety facility that is staffed by both Fire and Law Enforcement personnel.
Day Creek Station #173	12770 Firehouse Court	Medic Engine 173, Captain Specialist/Investigator, Hazardous Material Unit
Jersey Station #174	11297 Jersey Boulevard	Medic Engine 174 and Medic Truck 174
Banyan Station #175	11108 Banyan Street	Medic Engine 175, Medic Truck 175, Technical Rescue Unit, Water Tender, Shift Battalion Chief
East Ave. Station #176	5840 East Avenue	Medic Engine 176 and OES 8637 (Brush Engine)
Hellman Station #177	9270 Rancho St.	Medic Engine 177 and Brush Engine 177

Table 5.15-1 Fire Protection Facilities

Source: Bell 2021.

Note: Medic engines and trucks, captain specialist, and shift battalion chief are staffed units/positions. All other units are cross-staffed with on-duty personnel.

To provide a consistent emergency response service throughout the Fire District, response to a call for emergency service is typically handled by the crew at the station nearest to the emergency. However, when simultaneous emergencies occur in a particular station's response area, crews from other stations assist. This situation is known as "drawdown." The response capacity for a particular part of the Fire District has to be drawn down in order to meet the demand for services outside of the assigned response areas. In 2020, the Fire District responded to approximately 16,470 incidents. Of these, approximately 84 percent were for medical emergencies, 9 percent were for fires, and 7 percent were for other purposes (e.g., hazardous materials response, water salvages, public service request). Table 5.15-2 provides the 2020 call for service data for each fire unit.

Unit	Number of Calls
Medic Engine 171	3,691
Medic Engine 172	3,674
Medic Engine 173	2,685
Medic Engine 174	3,289
Medic Truck 174	1,439
Medic Engine 175	1,664
Medic Truck 175	904
Medic Engine 176	926
Medic Engine 177	1,244

Table 5.15-2 Fire Protection 2020 Calls for Service

Source: Bell 2021.

The Fire District participates in automatic and mutual aid agreements with San Bernardino County fire agencies, which are outlined in the 2020 San Bernardino County Fire and Rescue Mutual Aid Operational Plan. To combat emergency situations that are beyond the control of any one agency, the County of San Bernardino, fire district agencies, and municipal fire departments are signatories to the State of California Master Mutual Aid Plan. To maximize the resources in the county and assist in the coordination of such resources, a mutual aid system divides the county into seven zones; the city is in Zone 1, Valley Area, which includes all the agencies in the San Bernardino Valley—Chino Valley Fire Protection District, Colton Fire Department, Montclair Fire Department, Ontario Fire Department, Redlands Fire Department, Rialto Fire Department, etc., and CAL FIRE in cities where contract services are provided. The agencies in Zone 1 adhere to the State Master Mutual Aid System. San Bernardino County Fire Department is included in mutual aid agreements but is not an agency in Zone 1.

In addition to the automatic and mutual aid agreements, the Fire District has a contract with CAL FIRE to provide wildland fire protection and suppression services for the large, undeveloped areas of the Fire District, including areas in the city and unincorporated areas. This contract is inclusive of land that has been dedicated as conservation or preserve area as well as land eligible for development but not currently developed.

Fire protection and emergency medical response services for the city are currently funded by the Fire District's share of the property tax and a special tax associated with Community Facilities District 85-1 and Community Facilities District 88-1 (CFD 85-1 and CFD 88-1) (Ball 2021).

In response to anticipated continued growth in both residents and businesses, the Fire District has a long-range plan for meeting demands for service. It currently has plans to add two new fire stations and potentially relocate an existing station.

Construction on Fire Station 178 is scheduled to begin in the first quarter of calendar year 2022. This station will be on Town Center Drive about a half mile east of Haven Avenue. The opening of this station will help to fill a travel time gap that has existed in the center of the city for many

years. It will also reduce some of the current call volumes of Stations 172, 173, and 174 and should reduce the number of times the Fire District experiences drawdown. Construction is expected to be completed and the station fully staffed by the second quarter of calendar year 2023.

The Fire District has acquired property for the construction of Station 179, which will be on 8th Street just east of Archibald Avenue. This addition of this station will enhance the service provided to the southwest portion of the city. Construction of Station 179 is planned to begin between 2025 and 2027. The project is anticipated to have a 12- to 18-month build time.

Station 171 is the oldest operating station in the Fire District. A cost-benefit analysis has determined that it is better to construct a new station than to modernize the existing building and facilities. Additionally, constructing a new station provides the Fire District with the opportunity to potentially relocate the station to better serve the residents and businesses of the west-central part of the city by closing current travel time gaps. The Fire District is actively exploring various locations for a new Station 171 and is conducting feasibility assessments of acquiring the necessary land (Ball 2021).

5.15.1.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

FP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. This page intentionally left blank.



Figure 5.15-1 - Rancho Cucamonga Fire District Station Map 5. Environmental Analysis

All RCFD Fire Stations offer Sharps Disposal in an approved container and are Safe Surrender sites.

Fire Station	Address	Services	
Amethyst Station #171	6627 Amethyst St.	Sandbags, Sharps, Safe Surrender	
Public Safety Facility / Station #172	8870 San Bernardino Rd.	Sharps, Safe Surrender	
Day Creek Station #173	12270 Firehouse Ct.	Sharps, Safe Surrender	
Jersey Station #174	11297 Jersey Blvd.	Sharps, Safe Surrender	
All-Risk Training Center	11285 Jersey Blvd.		
Banyan Station #175	11108 Banyan St.	Sandbags, Sharps, Safe Surrender	
East Ave. Station #176	5840 East Ave.	Sandbags, Sharps, Safe Surrender	
Hellman Station #177	9270 Rancho St.	Sandbags, Sharps, Safe Surrender	

Rancho Cucamonga Fire District Headquarters | 10500 Civic Center Dr. Rancho Cucamonga CA 91730 | 1-909-477-2770



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5.15.1.3 Plans, Programs, and Policies

The following elements of the proposed General Plan discuss the fire protection and emergency services in the city.

Mobility and Access Element

- **Goal MA-2 ACCESS FOR ALL.** A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all uses.
- MA-2.8 New Streets. Require new roadway connections to improve emergency accessibility and roadway connectivity north of State Route 210 and within the Southeast Area.
- **Goal MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.4 Emergency Access. Prioritize development and infrastructure investments that work to implement, maintain, and enhance emergency access throughout the community.

Safety Element

- **Goal S-1 LEADERSHIP.** A city that is recognized for its leadership role in resilience and preparedness.
- **S-1.1 City Staff Readiness.** Ensure City staff and departments demonstrate a readiness to respond to emergency incidents and events.
- S-1.4 WUIFA Access Points. Require all new developments and redevelopments within the WUIFA to provide a minimum of two points of access by means of public roads that can be used for emergency vehicle response and evacuation purposes.
- S-1.5 Enhanced Circulation. In areas of the city with limited access routes and circulation challenges, require additional roads and improvements to ensure adequate emergency vehicle response and evacuation.
- S-1.7 Maintenance of Plans. Maintain and regularly update the City's Local Hazard Mitigation Plan (LHMP) as an integrated component of the General Plan, in coordination with the Community Wildfire Protection Plan (CWPP), the Emergency Operations Plan (EOP), the Evacuation Plan, and Standardized Emergency Management System (SEMS) compliant disaster plans to maintain eligibility for grant funding.
- **S-1.8 Regional Coordination.** Ensure regional coordination continues with neighboring jurisdictions, County, State, and Federal agencies on emergency management and risk reduction planning and activities.

Resource Conservation Element

- **Goal RC-3 HABITAT CONSERVATION.** Wildlife habitats that support various plants, mammals, and other wildlife species.
- **RC-3.7 Urban Forestry Plan**. Minimize damage associated with wind- and firerelated hazards and risks and address climate change and urban heat island effects through the development of an urban forestry plan that addresses and proper and appropriate landscaping, plant and tree selection and replacement, planting, and vegetation management techniques.

5.15.1.4 Environmental Impacts

Methodology

Based on information provided by the Fire District, impacts related to fire protection services are assessed by the Fire District on a project-by-project basis and a systems approach to service delivery. A project's land use, fire-protection-related needs, whether project sites meet the recommended response distance and fire safety requirements, and project design features that would reduce the demand for fire protection services are taken into consideration. Beyond the standards in the Rancho Cucamonga Fire Code, consideration is given to the project size and components, required fire flow, response distance for engine and truck companies, fire hydrant sizing and placement standards, access, potential to use or store hazardous materials, and potential for hazardous operations. Assessment of impacts considers whether implementation of projects would create the need for a new fire station or expansion, relocation, or consolidation of an existing facility to accommodate increased demand. Consultation with the Fire District is also conducted to determine the project's effect on fire protection and emergency medical services.

Where a project causes a need for additional fire protection and emergency medical services resulting in the need to construct new facilities or additions to existing facilities, and the construction results in a potential impact to the environment, then the impact would need to be assessed in the EIR for the project. The ultimate determination of whether there is a significant impact to the environment related to fire protection and emergency medical services from a project is determined by whether the construction of new or expanded fire protection and emergency medical facilities is a reasonably foreseeable direct or indirect effect of the project.

Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-1: The proposed project would introduce new structures, residents, and workers into the Rancho Cucamonga Fire Protection District's service boundaries, thereby increasing the requirement for fire protection personnel. [Threshold FP-1]

Based on information provided by the Fire District, increased demands for fire protection and emergency medical services result from increases in permanent population, but can also be related to the type, location, and configuration of land uses. The General Plan Update anticipates that the city's permanent population will increase by approximately 60,000 residents over the next 20 years. Additionally, the General Plan Update anticipates an increase in the number of businesses that will be operating in Rancho Cucamonga, including a broad range of commercial, industrial, and warehouse/distribution businesses.

Based on consultation with the Fire District, the anticipated increases in population and businesses can be adequately served by existing fire stations and the planned opening of Stations 178 and 179. The adoption of the General Plan Update would not in itself create a need for new or altered facilities. If the General Plan Update is implemented as proposed, the currently planned additional response capacity that will result from staffing Stations 178 and 179 would be needed to continue delivering the current level of service to existing and new residents and businesses. In the event that service demands begin to exceed the service capacity of the existing and planned stations and their current and proposed staffing, the Fire District will consider adding additional companies to the response system. All existing stations, along with Stations 178 and 179, are able to accommodate additional companies without having to physically expand the stations.

All development in the city that results from the implementation of the General Plan Update will be reviewed by the Fire District for compliance with applicable provisions of the California fire and residential codes and the Fire District's Standards and Guidance documents. This will ensure that all future development will benefit from the most current fire prevention and safety standards, which is expected to help keep service demands within projected year-over-year increases.

Because adoption of the General Plan Update would not create an immediate need for increased or enhanced response capacity, the impact of the adoption of the General Plan Update would be less than significant to fire protection (Ball 2021).

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.15-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.15-1 would be less than significant.

5.15.1.5 Cumulative Impacts

The geographic area for the cumulative impact analysis of fire protection services is the entire service territory for the Fire District, which is the city and the unincorporated sphere of influence north of the City. Future development in the city based on buildout of the City's General Plan Update is expected to increase demand for fire protection services and would contribute to the need to construct new facilities, increase staffing for existing engine and/or truck companies, add additional companies or specialized response units, and/or add on-duty personnel. Increased demands for fire protection and other emergency services result from increases in permanent population but can also be related to the size and height of buildings and the different types of land uses.

A fiscal impact analysis completed for the General Plan Update estimated that the development anticipated by the General Plan would add 10,568 calls for service by the end of the 20-year planning period. That would be a 54 percent increase in calls for service compared to the calls for service for 2020. Such an increase in call volume would impact the current service capacity of the Fire District. Drawdown conditions would occur far more frequently in already busy response areas, which would impact all residents and businesses with increased travel and overall response times. To prevent this from happening, additional capacity will be needed to handle the expected increase in calls for service.

Each year, Firehouse Magazine collects data and reports on the busiest stations across the country. The report for 2019, the most recent year for which complete data is available, shows that Rancho Cucamonga stations and units are, by comparison, fairly busy at current response levels. Firehouse Magazine reported that the busiest station in the survey was Los Angeles City Fire Department Station 9, which had 29,465 calls for service among the eight units at the station, or 3,683 calls per unit. Also in the top busiest stations were Sacramento City Station 2 with 15,823 calls among five units, or 3,165 calls per unit and Orange County Fire Authority Station 22 with 10,859 calls among three units, or 3,620 calls per unit. San Bernardino County Station 221 ranked number 27 in the survey with 13,445 calls among four units, or 3,361 calls per unit.

Rancho Cucamonga units are as busy as some of the units at the nation's busiest stations. Additional calls for service in the response areas of some of these units, with the current staffing level and response capacity, will continue to produce undesirable drawdown conditions. Additionally, response times throughout the Fire District would reasonably be expected to increase as the General Plan is implemented.

The cumulative impacts of the General Plan Update are providing evidence that the construction and staffing of Station 178 and 179 are critical in maintaining current service levels. Increases in population and commercial development have been anticipated by the Fire District and would have occurred over time even without the General Plan Update. Therefore, it is not the General Plan Update that is producing these impacts but rather the natural and predictable development of a community that is in the development phase in which Rancho Cucamonga finds itself. The pace at which increases in population occur and new businesses that are projected by the General Plan Update will guide the Fire District in its implementation of service enhancements. It is possible that the construction and staffing of Station 179 will have to be brought forward in time. Likewise, additional companies may have to be added to existing stations in order to meet service demands and minimize drawdown. As previously noted, all existing and planned stations have or will have capacity for additional companies without having to expand the size of the stations.

Fortunately, the fiscal impact analysis for the General Plan Update found that increased property tax generated by new, ground up developments along with redevelopment that results in higher per acre land values will increase the Fire District's General Funds in rough proportions, providing funding for any capital improvements necessary to obtain and maintain adequate fire protection facilities and equipment along with funding necessary for additional staffing. This will allow the Fire District's performance objectives to continue to be met. As increases in demand would be incremental over time, the City and the Fire District would continue to regularly monitor emergency services resources to ensure that adequate facilities, equipment, and staffing are available to serve existing and future development and population increases.

Additionally, new development in the City, including development assumed for buildout of the 2020 General Plan, would be required to comply with all applicable codes, ordinances, and regulatory requirements, including the current editions of the California Building, Fire, and Residential Codes, regarding fire prevention and suppression measures, fire hydrants, automatic fire extinguishing systems, fire access, and water availability, among other measures. The applicable provisions of the Fire District's Standards and Guidance Documents, which provide interpretation and explanations of the Fire Code, will also be incorporated into the respective development projects. Future development in the city would also have to comply with applicable hazard and risk reduction requirements and best practices, which will help to reduce the demand for fire protection services. Individual projects would be reviewed by the Fire District to determine the specific requirements applicable to the development and to ensure compliance with these requirements. This further ensures an adequate level of service for fire protection and emergency services to residents and businesses throughout the city.

As a result of long-term planning for and anticipation of continued development and growth in the City and having plans for additional response capacity already in place, the cumulative impacts of the General Plan Update will not be significant impact on the Fire District (Ball 2021).

The Fire District services the City of Rancho Cucamonga. Implementation of the proposed General Plan Update would introduce new structures and additional residents to the City, thus increasing the demand for fire protection services. Although the Fire District service area is located within the City, in the event of an emergency within the city that required more resources than the current fire stations could provide, the Fire District would direct resources to the city from other nearby stations and, if needed, would request assistance from other nearby fire departments. Therefore, the proposed General Plan Update's contribution to cumulative impacts would be less than cumulatively considerable.

5.15.1.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and proposed General Plan policies, the impact would be less than significant.

5.15.1.7 Mitigation Measures

No mitigation measures are required.

5.15.1.8 Level of Significance After Mitigation

Fire Protection and Emergency Services

Less than significant.

Cumulative Impacts

Less than significant.

5.15.2 POLICE PROTECTION

5.15.2.1 Environmental Setting

Regulatory Background

Municipal Code: Police Impact Fee

Chapter 3.64, Police Impact Fee, of the Rancho Cucamonga Municipal Code was enacted to prevent new residential and commercial/industrial development from reducing the quality and availability of public services provided to residents of the city by requiring new residential and business development to contribute to the cost of expanding the availability of police assets in the city.

Standard Conditions of Approval

There are no existing regulations relates to police protection services and facilities.

Existing Conditions

The City of Rancho Cucamonga contracts with the San Bernardino County Sheriff's Department (SBSD) for law enforcement services. The City began contracting with the Sheriff's Department in 1977, and services include traffic services, investigations, and safety services. SBSD currently has 82 Sheriff's personnel serving citizens in nearly 38 square miles and has one of the largest volunteer units in the Inland Empire (SBSD 2021). The number of volunteer hours dedicated to the department and the City continues to be the highest in the county. There are currently four volunteer units that help support the SBSD: Explorers, Mounted Citizen Volunteers, Reserves, and Citizen Volunteers (Ramos 2021).

SBSD is divided into six different areas for patrols (called "beats") that cover the following geographic areas:

- Beat Area 1: The northwest portion of the city
- Beat Area 2: The middle portion of the city, north of Base Line Road
- Beat Area 3: The eastern and western central portions of the city
- Beat Area 4: The southwestern portion of the city
- Beat Area 5: The southernmost corridor and industrial parks
- Beat Area 6: The easternmost portion of the city

The size of each beat area is determined by population and service calls (Ramos 2021).

With a population of over 175,000 residents, the ratio of officers to residents is approximately 1 officer for every 1,614 residents. The Department's average response time is determined by priority levels (Ramos 2021):

- Priority E: 04:13 min.
- Priority 1: 07:40 min.
- Priority 2: 10:17 min.
- Priority 3: 11:23 min.
- Priority 4: 12:23 min.

The approximate 30,000-square-foot SBSD headquarters is at 10510 Civic Center Drive. There is one sheriff's substation in Rancho Cucamonga at Victoria Gardens, and SBSD plans for a Northend Substation at the southwest corner of Milliken Avenue and Grizzly Drive. Currently, there is no estimated completion date for construction of the proposed Northend Substation (Ramos 2021). All SBSD training facilities used are in the City of San Bernardino at the San Bernardino County Sheriff-Coroner Department's Training Center and Academy.

5.15.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

PP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

5.15.2.3 Plans, Programs, and Policies

Mobility and Access Element

- **Goal MA-2 ACCESS FOR ALL.** A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all uses.
- MA-2.8 New Streets. Require new roadway connections to improve emergency accessibility and roadway connectivity north of State Route 210 and within the Southeast Area.
- **Goal MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.4 Emergency Access. Prioritize development and infrastructure investments that work to implement, maintain, and enhance emergency access throughout the community.

Safety Element

- **Goal S-1 LEADERSHIP.** A city that is recognized for its leadership role in resilience and preparedness.
- **S-1.1 City Staff Readiness.** Ensure City staff and departments demonstrate a readiness to respond to emergency incidents and events.
- S-1.5 Enhanced Circulation. In areas of the city with limited access routes and circulation challenges, require additional roads and improvements to ensure adequate emergency vehicle response and evacuation.

- S-1.7 Maintenance of Plans. Maintain and regularly update the City's Local Hazard Mitigation Plan (LHMP) as an integrated component of the General Plan, in coordination with the Community Wildfire Protection Plan (CWPP), the Emergency Operations Plan (EOP), the Evacuation Plan, and Standardized Emergency Management System (SEMS) compliant disaster plans to maintain eligibility for grant funding.
- **S-1.8 Regional Coordination.** Ensure regional coordination continues with neighboring jurisdictions, County, State, and Federal agencies on emergency management and risk reduction planning and activities.
- **S-1.9 Mutual Aid.** Ensure mutual aid agreements with Federal, State, local agencies, and the private sector establish responsibility boundaries, joint response services, and multi-alarm and station coverage capabilities.

5.15.2.4 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-2: The proposed project would introduce new structures, residents, and workers into SBSD's service boundaries in the city, thereby increasing the requirement for police protection personnel. [Threshold PP-1]

Implementation of the proposed General Plan Update could result in the addition of approximately 60,000 residents from development throughout the Study Area. Upon implementation of the General Plan Update, SBSD would maintain appropriate staffing to ensure compliance with local and regional standards for response time and coverage. As the City's population increases, additional staff will be required. Based on the department's current staffing ratio of 1 officer for every 1,614 residents, the incremental development resulting from implementation of the General Plan Update would result in the demand for approximately 37 additional law enforcement officers to maintain the current level of service. This increase in demand for police services would be met through the hiring of additional staff, as needed, which would be funded through existing funding mechanisms, such as the general fund revenue and grant funding. The demand can be served with additional patrols; however, no additional police services would be required to support the additional officers. Therefore, impacts related to police services would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.15-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.15-2 would be less than significant.

5.15.2.5 Cumulative Impacts

The SBSD services the City of Rancho Cucamonga. Implementation of the proposed General Plan Update would introduce new structures and additional residents to the city, thus increasing the demand for police protective services and increasing response time. SBSD services the entire county of San Bernardino, but the General Plan Update, in combination with other proposed, approved, and reasonably foreseeable development in the county, would not contribute to a cumulative increase in the demand for law enforcement services within the county. As discussed above, the additional 37 officers would maintain current response times in the city, and no additional police stations would be required to support the additional officers. Therefore, the impact would be less than cumulatively considerable.

5.15.2.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impact would be less than significant: 5.15-2,

5.15.2.7 Mitigation Measures

With implementation of the relevant goals and policies in the proposed General Plan Update, no significant adverse impacts related to police protection services are expected. Thus, no mitigation measures are required.

5.15.2.8 Level of Significance After Mitigation

Police Protection

Less than significant.

Cumulative Impacts

Less than significant.

5.15.3 SCHOOL SERVICES

5.15.3.1 Environmental Setting

Regulatory Background

State Regulations

California State Assembly Bill 2926: School Facilities Act of 1986

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorizes a levy of impact fees on new residential and commercial/industrial development. The Bill was expanded and revised in 1987 through the passage of AB 1600, which added Sections 66000 et seq. to the Government Code. Under this statute, payment of impact fees by developers serves as CEQA mitigation to satisfy the impact of development on school facilities.

California Senate Bill 50

Senate Bill (SB) 50, passed in 1998, provides a comprehensive school facilities financing and reform program and enables a statewide bond issue to be placed on the ballot. Under the provisions of SB 50, school districts are authorized to collect fees to offset the costs associated with increasing school capacity as a result of development and related population increases. The funding goes to acquiring school sites, constructing new school facilities, and modernizing existing school facilities. SB 50 establishes a process for determining the amount of fees developers would be charged to mitigate the impact of development on school districts from increased enrollment. According to Section 65996 of the California Government Code, development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."

Under this legislation, there are three levels of developer fees that may be imposed upon new development by the governing school district. Level I fees are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level II fees require the developer to provide one-half of the costs of accommodating students in new schools, and the state provides the remaining half. To qualify for Level II fees, the governing board of the school district must adopt a School Facilities Needs Analysis and meet other prerequisites in accordance with Section 65995.6 of the California Government Code. Level III fees apply if the state runs out of bond funds, allowing the governing school district to impose 100 percent of the cost of school facility or mitigation on the developer, minus any local dedicated school monies.

Standard Conditions of Approval

There are no existing regulations related to to school facilities.

Existing Conditions

Primary public education services are provided by five school districts, including four elementary school districts and one high school district. The City also has several private K-12 schools. The Alta Loma School District, which serves the northwestern section of the city, operates 8 elementary schools (K-6) and 2 middle schools (grades 7 and 8). The Central School District, which serves the west-central portions, operates 8 schools. The Cucamonga School District, which serves the southern portions, operates 3 elementary schools and 1 middle school. The Etiwanda School District, which serves the eastern portion of the city and a portion of the City of Fontana, operates 10 elementary schools and 4 middle schools. The unincorporated SOI area to the north is served by the Alta Loma School District (Rancho Cucamonga 2009). District boundaries and individual school locations are shown on Figure 5.15-2, *School Locations*.

The Chaffey Joint Union High School District provides all secondary public education in the city. The District operates 9 high schools: Alta Loma High School, Chaffey High School, Colony High School, Etiwanda High School, Los Osos High School, Montclair High School, Ontario High School, Rancho Cucamonga High School, and Valley High School.

5.15.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

SS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for school services. This page intentionally left blank.





Figure 5.15-2 - School Locations Map 5. Environmental Analysis

School Types

J		
S		
C		

Elementary School

Junior High/Middle School

High School

Chaffey Community College

Rancho Cucamonga City Boundary Sphere of Influence





PlaceWorks

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5.15.3.3 Plans, Programs, and Policies

Land Use and Community Character Element

- **Goal LC-4 COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- LC-4.3 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well-structured such that the physical layout, and land use mix promote walking to services, biking and transit use, and have the following characteristics.
 - Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles.
 - Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile.
 - Require development patterns such that 60 percent of dwelling units are within 1/2-mile walking distance to neighborhood goods and services.
 - Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context.
 - Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition.
- LC-4.11 Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building and housing types, and lack of walking or biking access to parks, schools, goods, and services.
- **Goal LC-5 CONNECTED CORRIDORS.** A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.
- LC-5.1 Improved Street Network. Systematically extend and complete a network of complete streets to ensure a high-level of multi-modal connectivity within and between adjacent Neighborhoods, Centers and Districts. Plan and implement targeted improvements to the quality and number, of pedestrian and bicycle routes within the street and trail network, prioritizing connections to schools, parks, and neighborhood activity centers.

Open Space Element

- **Goal OS-1 OPEN SPACE.** A complete, connected network of diverse parks, trails, and rural and natural open space that support a wide variety of recreational, educational and outdoor activities.
- **OS-1.9 Joint Use.** Pursue and expand joint use of public lands that are available and suitable for recreational purposes, including school district properties and flood control district, water district, and other utility properties.

Mobility and Access Element

- **Goal MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.

Public Facilities and Services Element

- **Goal PF-1 STATE-OF-THE-ART FACILITIES.** Residents enjoy state-of-the-art public and community facilities that support existing programs, accommodate future needs, and are accessible to all members of the community.
- **PF-1.3 Facility Collaboration.** Maximize public facility use by sharing with nonprofit organizations, school districts, and community organizations. Look for opportunities to create joint-use community space at facilities owned by private organizations such as faith-based groups and service clubs.
- **Goal PF-2 EDUCATION.** All residents have access to high-quality educational opportunities.
- **PF-2.1Schools.** Consider the needs of the school districts that serve Rancho
Cucamonga in future planning and development activities.
- **PF-2.2 Colleges.** Partner with local public and private schools and Chaffey Community College to maintain effective educational, vocational, and workforce programs for all residents.

5.15.3.4 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-3: The proposed project would generate new students who would impact the school enrollment capacities of area schools. [Threshold SS-1]

Implementation of the proposed General Plan Update could result in the development of up to approximately 17,300 dwelling units in the city. Assuming 0.5 student per residential unit, buildout of the General Plan could generate approximately 8,650 K-12 students, or approximately 665 per grade. The city is served by 29 elementary schools, 7 middle schools, and 4 high schools, and these existing schools could likely serve these new students, but depending upon the location of new development, new school facilities could be required. As development projects are proposed, the appropriate school districts will be notified and would participate in the review process, which would allow for school planning purposes. In addition, pursuant to SB 50, each of the school districts can collect school impact fees may not provide full funding for all necessary resources, exceeding school capacity would not be considered a physical impact under CEQA, and payment of fees is considered full mitigation. Therefore, buildout of the proposed General Plan Update would result in a less than significant impact related to schools. No mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.15-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.15-3 would be less than significant.

5.15.3.5 Cumulative Impacts

The Alta Loma School District, Central School District, Cucamonga School District, and Etiwanda School District service the City of Rancho Cucamonga. Implementation of the proposed General Plan Update would introduce additional residents to the city, thus increasing the demand for school services. Increases in the student population in the city could require the expansion of existing facilities or construction of new facilities. Construction of these facilities would result in impacts like those identified throughout this EIR for development within the city. No additional impacts would occur, and the impacts related to school facilities would be less than cumulatively considerable.

5.15.3.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impact would be less than significant: 5.15-3.

5.15.3.7 Mitigation Measures

With implementation of the relevant goals and policies in the proposed General Plan Update and with compliance with existing regulations, no significant adverse impacts related to school services are expected. Thus, no mitigation measures are required.

5.15.3.8 Level of Significance After Mitigation

School Services

Less than significant.

Cumulative Impacts

Less than significant.

5.15.4 LIBRARY SERVICES

5.15.4.1 Environmental Setting

Regulatory Background

City Municipal Code: Library Impact Fee

Chapter 3.56, Library Impact Fee, of the Rancho Cucamonga Municipal Code, was enacted to prevent new residential development from reducing the quality and availability of public services provided to residents of the city by requiring new residential development to contribute to the cost of expanding the availability of library and cultural center assets in the city.

Standard Conditions of Approval

There are no existing regulations related to library services and facilities.

Existing Conditions

Rancho Cucamonga Public Library was established in 1994 when the City assumed operation of the local library from the San Bernardino County Library System. In addition to the circulation and processing of library materials, the City's Library Services Department offers children's services, programs, and special events; adult information services; and adult and family literacy services. The Library is consistently one of the busiest library systems in the Inland Empire.

The Archibald Library (opened in 1994) is approximately 22,500 square feet, houses approximately 140,000 physical items, and contains a Technology Center and story theater.

The Paul A. Biane Library (opened in 2006) is part of the Victoria Gardens Cultural Center. This approximately 39,000-square-foot facility is home to a book and media collection of approximately 121,000 items and features amenities such as a 21-seat Technology Center, story theater, and a public reading room. The City is currently developing an interactive discovery

space in the Biane Library facility that will feature museum-quality exhibits and STEM-related learning opportunities for all ages.

In July 2021, a library materials vending machine was installed outside the City's Family Resource Center. This unit houses 340 physical items and is available to residents 24 hours a day. This is one of many ways that the Library is working to utilize nontraditional means of serving the Rancho Cucamonga population as the community grows, while providing a more equitable distribution of library services across the city.

National standards for per capita public library services do not currently exist, but the City looks to keep pace with the average per capita measures delineated in the annual State Library Statistics Report. A Master Library Services Plan and a facilities assessment need to be completed to establish local per capita standards and to outline a path forward. Currently, library space and the size and replacement cost of the Library's collection serve as the basis for the City's Development Impact Fee program. Through this program, the City collects impact fees, constructs new library facilities, and purchases new materials to ensure services continue to be provided at the same level as the population grows. This impact fee program will apply to the growth anticipated in the General Plan Update and will mitigate any potential impacts to this service.

5.15.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for library services.

5.15.4.3 Plans, Programs, and Policies

Public Facilities and Services Element

Goal PF-3 Libraries. High-quality library resources are provided to meet the educational, cultural, civic, and general business needs of all residents.

PF-3.1 Library. Continue to improve the local libraries system, complete with community facilities that provide knowledgeable, service-oriented staff and offer access to information, books, and other materials in a variety of formats, including emerging technologies. Consider future options for providing library services that are flexible and will maximize library services while keeping costs affordable.

5.15.4.4 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-4: The proposed General Plan Update would not result in a substantial adverse physical impact related to construction of facilities for the provision of library services. [Threshold LS-1]

Implementation of the proposed General Plan Update would add new housing and could increase the population in the city by as much as 60,000 at buildout. An increase in residents under the proposed General Plan Update would increase the demand for library services. While the City does not have any currently planned library facilities, the Development Impact Fee program was developed to provide library space and replacement cost of the Library's collection. However, construction of any library facilities in the city would be within the scope of development assumed throughout this EIR. Library construction, if needed in the future, would be subject to all applicable regulations, standard conditions of approval, and mitigation measures identified throughout this EIR. There would be no additional impact with respect to the provision of libraries. Therefore, there would be a less than significant impact related to library services.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.15-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.15-4 would be less than significant.

5.15.4.5 Cumulative Impacts

Implementation of the proposed General Plan Update would introduce new structures and additional residents to the City, thus increasing the demand for library services. The proposed Project, in combination with other proposed, approved, and reasonably foreseeable development in the City, would contribute to a cumulative increase in the demand for library services within the City. As discussed above, by requiring future projects to contribute to the Development Impact Fee program library space and replacement cost of the Library's collection would be able to meet future demand. Therefore, the proposed General Plan Update's contribution to impacts on library services would be less than cumulatively considerable.

5.15.4.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impact would be less than significant: 5.15-4.

5.15.4.7 Mitigation Measures

With implementation of the relevant goals and policies in the proposed General Plan Update and payment of the City's Development Fee, no significant adverse impacts related to library services are expected. Thus, no mitigation measures are required.

5.15.4.8 Level of Significance After Mitigation

Library Services

Less than significant.

Cumulative Impacts

Less than significant.

5.15.5 REFERENCES

- Ball, Rob (Fire Marshal). 2021 (August 10). Email Attachment to PlaceWorks. Rancho Cucamonga Fire District.
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5.16 RECREATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Rancho Cucamonga General Plan Update to impact public parks and recreational facilities in the City and its sphere of influence (SOI). Cumulative impacts related to recreation would be within the city and SOI boundary.

Chapter Overview

This section includes a discussion of the recreational characteristics of the existing environment and the recreational opportunities available to the public in the city of Rancho Cucamonga. This section also assesses recreational facilities that would potentially be altered or be needed by the project's implementation and the consistency of the project with established relevant policies.

The General Plan Update would result in additional urban development in the city of Rancho Cucamonga and its SOI, which would modify the existing recreational needs of the city. Future development and redevelopment proposed under the General Plan Update would remain consistent with the design standards of the City's General Plan, standard conditions of approval, the municipal code, and would be subject to discretionary review by the appropriate commissions, committees, or councils. Overall, the development impact related to recreation is less than significant with application of laws and standard conditions of approval.

Heart of the Matter

People thrive when they have the opportunity to recreate, whether it be outdoors or indoors. Access to parks and recreation space in nature allows people to relieve stress, rejuvenate the spirit, improve mental health, and helps with sleep. As the population and housing density of Rancho Cucamonga increases, individual yards diminish and having a place nearby to play, to relax, or just be out of the house is an essential amenity. Although there are several parks and open space areas in the city, not all of them are within walking distance for all residents. Existing community open space amenities includes the natural and rural foothill open spaces, neighborhood and regional parks, and extensive network of trails that connect the City's open spaces to each other and to nearby neighborhoods. The City has a commitment to continue to grow and enhance the network of open spaces and trails linking them in an effort to remain a regional leader in environmental quality, quality of life, community health, and sustainable long-term value.

5.16.1 ENVIRONMENTAL SETTING

5.16.1.1 Regulatory Background

State Regulations

Quimby Act

The Quimby Act was established by the California Legislature in 1965 to provide parks for the growing communities in California. The act authorizes cities to adopt ordinances addressing parkland and/or fees for residential subdivisions for the purpose of providing and preserving open space and recreational facilities and improvements and requires the provision of three acres of park area per 1,000 persons residing within a subdivision, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the city may adopt a higher standard not to exceed five acres per 1,000 residents. The Quimby Act also specifies acceptable uses and expenditures of such funds.

Mitigation Fee Act

The California Mitigation Fee Act (Government Code §§ 66000 et seq.) allows cities to establish fees that will be imposed upon development projects for the purpose of mitigating the impact that the development projects have upon city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, the City must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; 3) Make findings each fiscal year describing the continuing need for fees that have been in the possession of the City for five years or more and that have not been spent or committed to a project; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under the Public Resource Code, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

Local Regulations

City of Rancho Cucamonga Municipal Code

Residential Recreation Areas and Facilities

Section 17.36.010 of the Rancho Cucamonga Development Code contains special development criteria for Residential Districts; it states the required provisions of private and common open space areas and recreational facilities by all residential developments. The standards include a requirement for private open space on the ground floor ranging from 150 square feet per unit

in the Medium High- and High-Density Residential district to 225 square feet per unit in the Medium Density Residential district and 300 square feet per unit in the Low Medium Density Residential district. The Low and Very Low-Density districts do not have a minimum private open space size requirement. Of the total area of private and common open space, approximately 35 to 40 percent should be useable open space, depending on the district.

Developments with 30 units or less are required to provide three recreational areas and facilities in the form of a large open lawn area, an enclosed tot lot, a spa/pool area, and/or barbecue facility (grill and benches, etc.). Developments with 31 to 100 units must provide two sets of three recreational areas and facilities (open lawn area, enclosed tot lot, spa/pool, common multipurpose rooms, and/or barbecue facility). Developments with 101 to 200 units must provide five recreational areas and facilities, consisting of a large open lawn, multiple tot lots, pool and spa, community multi-purpose rooms, barbecue facilities, court facilities (e.g., tennis courts, basketball courts), and/or jogging/walking trails. Another set of five recreational areas and facilities above the first 200 units (Rancho Cucamonga 2015).

Local Park Ordinance

The City's Local Park Ordinance (Ordinance No. 105) has been incorporated into the City's Municipal Code as Chapter 3.68.030 - Establishment and administration of Park In-Lieu/Park Impact Fees. This ordinance requires developers of residential projects to dedicate land and/or pay in-lieu fees for the provision of parklands at a standard of 3 to 5 acres of parkland per 1,000 residents of the new development. The provision of on-site open space and recreational facilities may be credited against the parkland dedication and/or fee requirement at the discretion of the Planning Commission (Rancho Cucamonga 2010).

Development Impact Fees

The City of Rancho Cucamonga Municipal Code (RCMC) includes recreation related Development Impact Fees in Chapter 3.52 (Community and Recreation Center Impact Fee) and Chapter 3.68 (Park In-Lieu/Park Impacts Fees). The purpose of these fees is to prevent new residential development from reducing the quality and availability of recreational amenities provided to residents of the city by requiring that new development contribute to the cost of expanding the availability of community and recreation centers and park assets in the city, as applicable (Rancho Cucamonga 2021a).

Funds for these recreational facilities have been established where all sums collected pursuant to the requirements outlined in the RCMC are deposited and used to expand on the availability of recreational and park assets for new development. Those recreational assets are identified in the Development Impact Fee Study prepared by NBS in 2020. The Study calculates impact fees based on the impact of development on certain capital facilities. The calculation used for impact fees satisfies relevant legal requirements including the California Mitigation Fee Act and the Quimby Act. The Study calculates two types of development fees for parks: fees for park land acquisition, and fees for park improvements. For park land acquisition, fees are subdivided into two types. For subdivision, the Quimby Act governs the fees for park land acquisition charged to residential development. For park land acquisition in projects that do

not involve a subdivision, fees are considered impact fees and are governed by the Mitigation Fee Act. For park improvements, fees are also considered impact fees regardless of whether the project involves a subdivision (Rancho Cucamonga 2020a).

Hiking and Riding Trails Master Plan

The City's Hiking and Riding Trails Master Plan includes a network of interconnected regional and community off-road urban and wilderness trails with existing and proposed trails. Regional Multi-Purpose Trails serve as the backbone of the public trail system connecting to regional parks, open space preserves, the San Bernardino National Forest, and other regional trails outside of the city. These trails primarily follow flood-control channels and utility corridors. Meanwhile, Community Trails allow for convenient off-road access to community facilities such as parks, schools, and shopping centers. These trails serve as collectors linking local feeder trails in subdivisions to the regional trail system and follow streets, utility corridors, and easements and are intended for equestrian and pedestrian use. Within housing subdivisions, local feeder trails also provide riding loops. Community and Multi-Use Regional Trails are connected to neighborhoods in Alta Loma and Etiwanda through a network of equestrian trails and the Victoria Park Lane Trail and the Terra Vista Greenway provide pedestrian and bike connections between schools and parks through the Victoria Park and Terra Vista neighborhoods. Additionally, the Pacific Electric Trail, a regional bike and walking trail, traverses the city from east to west (Rancho Cucamonga 2010).

The Equestrian/Rural Overlay District within the northwestern area of Rancho Cucamonga allows the keeping of horses and other farm animals and supports the implementation of a comprehensive equestrian trails system. In accordance with the Hiking and Riding Trails Master Plan, new development within the Equestrian/Rural Overlay District is required to provide community and local trails for equestrian use. The intent of the Plan is to create a connected system of equestrian trails that provides access to local and regional recreation areas including the National Forest, equestrian facilities, regional parks, and City regional and community trails.

The City Trail Implementation Plan, adopted in 1991, includes detailed design standards for each trail type (e.g., hiking, riding, and bicycle), aspects of trail implementation, and administration of the trail system by the city. Many of these trails pass through and are around the Plan Area (Rancho Cucamonga 1991).

Standard Conditions of Approval

There are no existing regulations that reduce impacts to recreational facilities.

5.16.1.2 Existing Conditions

The city of Rancho Cucamonga and its SOI include open space areas, natural trails, parklands, and recreational programs that serve the residents of Rancho Cucamonga and the surrounding communities.

The city has approximately 447.5 acres of parkland and recreational facilities. This area includes 25 neighborhood parks, four community parks, and four special use facilities. Table 5.16-1 includes a list of these facilities, while *Figure 5.16-2*, *Parks and Special Use Facilities* shows their general locations (Rancho Cucamonga 2021b).

The General Plan parks designation identifies existing and planned parks within the city and the SOI, including developed parkland owned by the City. Traditional neighborhood-level and community-level parks are included as parklands, as well as multi-purpose recreation-oriented lands such as the Epicenter and Central Park. Within areas where future residential development will occur, planned park sites have been identified for incorporation. Future parks will be defined by detailed neighborhood site. The City controls 130 acres of undeveloped parkland, not including undeveloped trail acreage (Rancho Cucamonga 2020b).

Regional Natural Areas

The city of Rancho Cucamonga's location allows for residents to access natural open space areas, including mountains, hillsides, canyons, and preserves.

Angeles National Forest

The Angeles National Forest is located on the northwestern front of the city of Rancho Cucamonga's City Limits. The Forest consists of approximately 700,000 acres that offers a variety of terrains and recreational opportunities. Elevations range from 1,200 to 10,064 feet and much of the forest is covered with dense chaparral, which changes to pine and fir-covered slopes at higher elevations. The Angeles National Forest offers recreational opportunities that include camping, picnicking, swimming, fishing, skiing, and the enjoyment and solitude of quiet wilderness areas. Trails within the forest accommodate hikers, equestrians, mountain bikers, and off-highway vehicle enthusiasts (Recreation 2021).

San Bernardino National Forest

The San Bernardino National Forest is located north and northeast of the city of Rancho Cucamonga's SOI. The Forest consists of more than 800,000 acres and offers a variety of terrains and recreational opportunities, as well as backcountry experiences. Elevations range from 2,000 to 11,502 feet and much of the forest is covered with dense chaparral, which changes to pine and fir-covered slopes at higher elevations. The San Bernardino National Forest is connected to the city's SOI by the Regional Multi-Purpose Trail and provides residents of Rancho Cucamonga recreational opportunities that include camping, picnicking, hiking, horseback riding, fishing, and enjoyment of quiet wilderness areas, among other outdoor activities. (Rancho Cucamonga 2010, USDA 2012).

Local Natural Areas

Trails are a valued asset for many residents of the city of Rancho Cucamonga who enjoy hiking, bicycling, and walking in the natural areas within and surrounding the community.

Multi-Use Regional and Community Trails

The city of Rancho Cucamonga has approximately 295 acres of land for recreational use within its Multi-Use Regional and Community Trails. These trails connect the residential areas to commercial activity centers and provide a network of interconnected off-road, urban, and wilderness trails that allow horseback riding, hiking, jogging, running, and walking into open space areas (Rancho Cucamonga 2010).

Etiwanda Heights Neighborhood and Conservation Plan

The Etiwanda Heights Neighborhood and Conservation Plan (EHNCP) proposed the annexation of more than 4,000 acres from San Bernardino County to be incorporated into the city of Rancho Cucamonga. The annexation of the Etiwanda Heights Neighborhood and Conservation Area extended the city's boundaries by 6.3 miles, making the city nearly 46.5 square miles. The San Bernardino County Local Agency Formation Commission approved the annexation on November 9, 2020 (CBLAFCO 2020). The EHNCP, adopted in 2019, lays out a comprehensive strategy for conserving 3,603 acres as rural/conservation area, and the development of a 790-acre neighborhood. The EHNCP proposes 2,700 to 3,000 single-family homes across 790 acres, 85 acres of new parks, open space, and facilities, 11 miles of new trails for enhanced recreational opportunities, 180,000 square feet of mixed-use commercial, new schools, and an additional east – west trail for increased city-wide trail connection (Rancho Cucamonga 2019). Figure 5.16-3, *Parks and Facilities Plan and EHNCP Area*, shows the location of this Etiwanda Height Neighborhood and Conservation Area as described in the EHNCP.

Other Local Natural Areas

The city of Rancho Cucamonga benefits from several undeveloped local natural areas that provide natural open space areas. These undeveloped areas include designated Conservation areas and Flood Control and Utility Corridors and areas designated as Open Space, with a maximum density of one dwelling unit per 10 acres, and Hillside Residential, with a maximum density of two units per acre. 1,457.43 acres in the city are designated as Conservation areas Additionally, 7,596.4 acres within the city and 1,867.5 acres in the SOI are designated as Open Space and will remain largely undeveloped (Rancho Cucamonga 2021b). Four conservation areas protected from development include the 760-acre North Etiwanda Preserve, 137-acre San Sevaine Spreading Grounds, the 880-acre U.S. Forest Service Conservation Area, and a 35-acre conservation area purchased as mitigation and set aside through a conservation easement to the San Bernardino County CSA 70 (10/2003).

Developed Parks

The public park system includes mini, neighborhood, community and major/regional parks that are differentiated by scale, population served, and amenities. Additional recreational facilities may also be available as part of homeowner association. New parks are planned for development within the city. Table 5.16-1, *Recreation, Park, and Special Use Facilities*, includes a list of the existing parks and recreational facilities within the city of Rancho Cucamonga.

Neighborhood Parks

Neighborhood parks are generally intended to serve the recreational needs of the nearby local community. Uses can include play courts, play fields, sitting areas, picnic areas, restrooms, walking trails, landscaping, and parking. The service area of neighborhood parks is typically up to a one-half-mile radius. The city's park system has recently been expanded by the Central Park and Etiwanda Park expansions. The city's existing 25 neighborhood parks encompass 167.7 acres of parkland (Rancho Cucamonga 2021b).

Community Parks

Community parks are 20 to 40 acres and are intended to serve the recreational needs of several neighborhoods. They can include passive and active recreation facilities or structured facilities (e.g. pools, gymnasiums, or community centers). Community parks are intended to have a service area of a 1- to 1.5-mile radius. Near Los Osos High School, a new Community Park is planned along northern Milliken Avenue. The city's existing four community parks encompass approximately 126.9 acres (Rancho Cucamonga 2021b).

Special Use Parks

Special use parks include parks and other City facilities that accommodate specialized recreational needs, such as dog parks or sports fields, or reflect important community values, such as a nature center or a heritage museum. Because of the specialized services, there is no established service area associated with a special use park. Examples of special use parks include the Demen's Trail, Adult Sports Complex, Rancho Cucamonga Family Sports Complex, and Central Park. The city's existing four special use parks encompass approximately 152.9 acres (Rancho Cucamonga 2010).

Private Parks

Although not a park type listed in the General Plan, Rancho Cucamonga has a few private parks in gated communities or neighborhoods, where the residents or HOA pay for park maintenance. There are no specific standards in acreage and amenities for private parks; the facility is determined pursuant to residential development standards, or a development agreement approved by the City and respective developer.

Other private parks include fee-for-service sports courts, courses, or fields. The city of Rancho Cucamonga does not have a public golf course maintained by the city. However, the city has the 128-acre Red Hill County Club Golf Course and Tennis center, which includes a private or fee-for-service golf course and private tennis court. These facilities offer views of the surrounding topography and provide additional recreational amenities.

Since golf course facilities are not maintained by the City of Rancho Cucamonga and are private fee-based facilities, the golf courses are not counted toward satisfying the City's Quimby requirement.

Map ID	Park Name	Location	Developed Acres
	noods Parks		
1	Bear Gulch Park	9094 Arrow Highway	4.6
2	Beryl Park East	6524 Beryl Street	10.0
3	Beryl Park West	6501 Carnelian Street	8.7
4	Church Street Park	10190 Church Street	7.0
5	Coyote Canyon Park	10967 Terra Vista Parkway	4.7
6	Day Creek Park	12350 Banyan Street	10.0
7	Ellena Park	7139 Kenyon Way	6.1
8	Garcia Park	13150 Garcia Drive	5.6
9	Golden Oak Park	9345 Golden Oak Road	5.0
10	Hermosa Park	6787 Hermosa Avenue	9.6
11	Kenyon Park	11481 Kenyon Way	7.8
12	Legacy Park	5858 Santa Ynez Plaza	3.8
13	Lions Park	9161 Base Line Road	4.6
14	Los Amigos Park	8625 Madrone Avenue	3.4
15	Milliken Park	7699 Milliken Park	8.0
16	Old Town Park	10033 Feron Boulevard	5.0
17	Olive Grove Park	13931 Youngs Canyon Road	7.4
18	Ralph M. Lewis Park	7898 Elm Street	8.0
19	Rancho Summit Park	5958 Soledad Way	6.7
20	Spruce Avenue Park	7730 Spruce Avenue	3.9
21	Victoria Arbors Park	7429 Arbor Lane	9.5
22	Victoria Groves Park	6840 Fairmont	6.0
23	Vintage Park	11745 Victoria Park Le	8.0
24	West Greenway Park	7756 Meadowcrest Court	6.2
25	Windrows Park	6849 Victoria Park Lane	8.1
		Total Neighborhood Park Acreage	167.7
Communi	ty Parks		
26	Mountain View Park	11701 Terra Vista Parkway	5.0
27	Etiwanda Creek Park	5939 East Avenue	37.9
28	Heritage Community Park	5546 Beryl Street	40.4
29	Red Hill Community Park	7484 Vineyard Avenue	43.6
		Total Community Park Acreage	126.9

Map ID	Park Name	Location	Developed Acres				
Specia	Special Use Facility						
30	Rancho Cucamonga Adult Sports Complex/Epicenter Stadium (LoanMart Field)	8378 Rochester Avenue	42.5				
31	Rancho Cucamonga Central Park; James L. Brulte Senior Center and Goldy S. Lewis Community Center	11200 Base Line Road	99.8				
32	Cucamonga/Demens Trail Rest		0.6				
33	Rancho Cucamonga Sports Center	8303 Rochester Avenue	100				
Total Special Use Facilities Acreage			152.9				
		Total Acreage	447.5				

Source: Rancho Cucamonga 2021b.

Other Recreational Areas

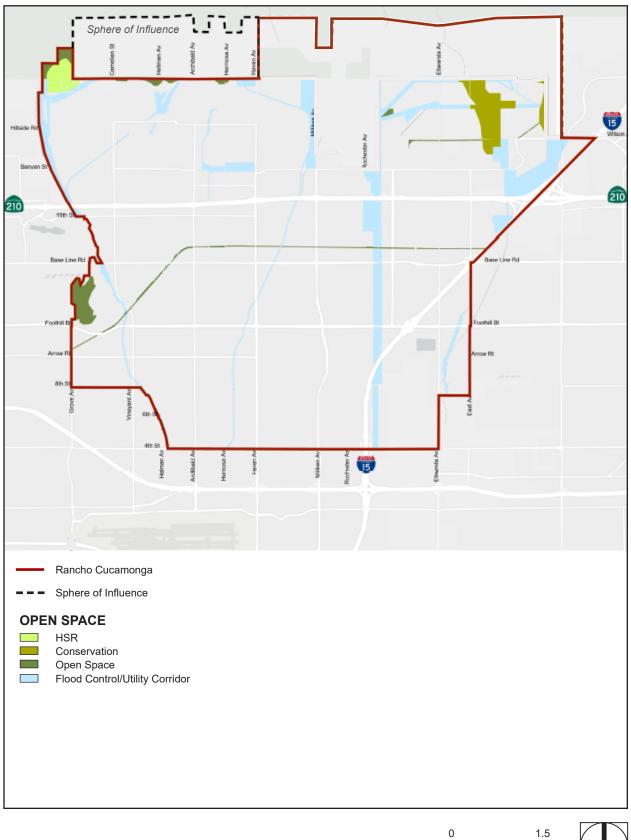
In addition to the parks and special facilities listed in Table 5.16-1, the city's Multi-Use Regional and Community Trails add approximately 295 acres of land for recreational use, bringing the total recreational area acreage in the city and SOI to 644. These trails provide a network of interconnected off-road, urban, and wilderness trails for horseback riding, hiking, jogging, running, and walking into open space areas and connect the residential areas to commercial activity centers. Figure 5.16-1, *Natural Open Spaces*, shows the open space in the city and SOI.

Joint-Use Facilities

The City of Rancho Cucamonga maintains joint-use agreements with four of the five school districts serving the city to offer use of the recreational facilities during evenings and weekends at 13 elementary schools, 4 middle schools, and 4 high schools. Joint use agreements benefit the community by expanding the availability of recreational spaces for residents when school sports programs are not using the fields. These joint-use recreational facilities include athletic fields, playgrounds, basketball courts, and other facilities. In other cases, the City's parks and recreational facilities are also available for shared use by community groups. These allow meeting space for groups for a variety of passive and active uses.

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Figure 5.16-1 - Natural Open Space 5. Environmental Analysis



Scale (Miles)

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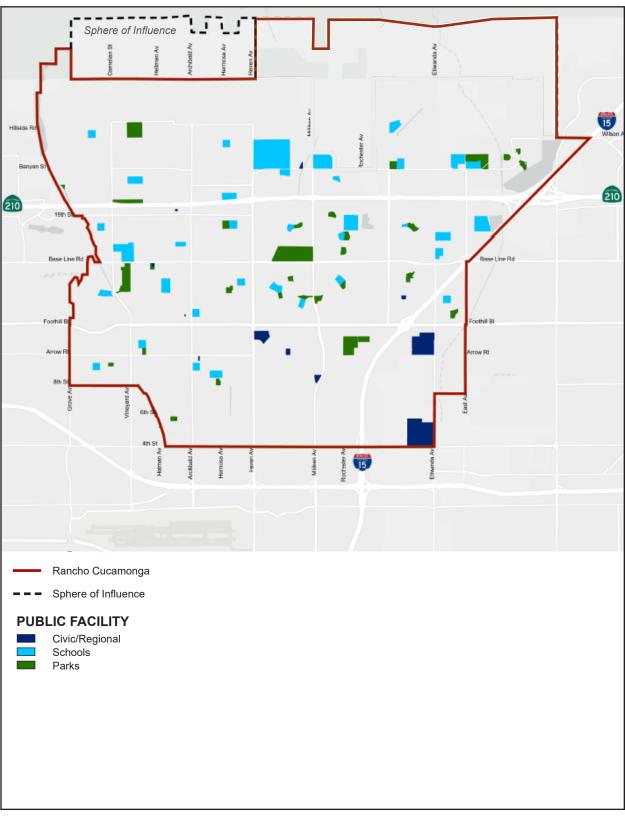


Figure 5.16-2 - Recreation, Park, and Public Facilities 5. Environmental Analysis

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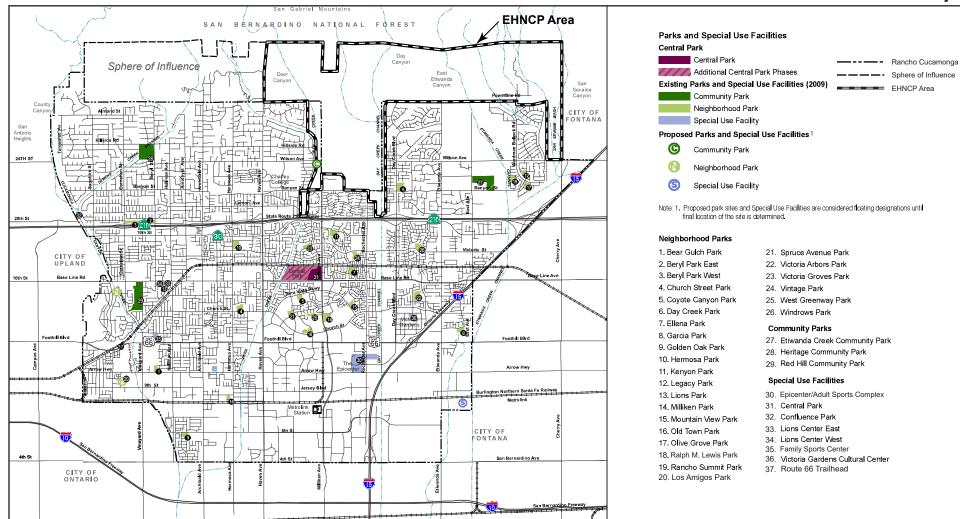


Figure 5.16-3 - Parks and Facilities Plan and EHNCP Area 5. Environmental Analysis

Scale (Miles)

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Recreational Programs

The Community Services Department is charged with providing community services and recreational and leisure time opportunities. This includes community classes, community involvement programs, meetings and event space reservations, adult and youth sports, special events, volunteer opportunities, cultural and performing arts events, programs for individuals with special needs, childcare and playschool, after-school programs, summer programs, senior recreation programs, and reservations for facilities. An abbreviated list of the types of recreation programs and services offered in the City of Rancho Cucamonga within the Community Services Department are as follows (Rancho Cucamonga 2020c):

- **Events:** The City of Rancho Cucamonga offers a variety of events for all ages. These events include a junior firefighter camp, fitness programs, yoga classes, tennis lessons, fencing lessons, dog training, hip hop dance training, computer programming, computer animation, cartoon and anime drawing, video game development, guitar lessons, parent support, various music lessons, and summer camps, among others (Rancho Cucamonga 2020d).
- Meetings and Event Space: The Community Services Department offers both indoor and outdoor facility rental options. Indoor facilities are categorized by Neighborhood, Community, and Specialty Center. Outdoor facility rentals include park shelters at 12 different city park sites. Rental fees are calculated according to user groups (Rancho Cucamonga 2020e).
- Sports: The City of Rancho Cucamonga offers a variety of sports programs for participants of all ages and abilities. These sports programs include basketball, pickleball, volleyball, Pee Wee Sports, non-city sponsored sports, soccer, baseball, and softball. Reservations are required for all organizations to use fields for sports (Rancho Cucamonga 2020f).
- Volunteers: The City of Rancho Cucamonga encourages residents of all ages to show pride and involve themselves in civic activities throughout volunteer work. Volunteer opportunities at the animal center, police department, fire district, and other community services are available (Rancho Cucamonga 2020g).
- Cultural and Performing Arts: Within the city of Rancho Cucamonga, the Lewis Family Playhouse located at the Victoria Gardens Cultural Center provides a quality, learning and performing experience for youth, teens, and adults in community theatre, as well as an award-winning Theater for Young Audiences, Headliner performances, and opportunities for local organizations to rental the theater for performance showcases (Rancho Cucamonga 2020h).
- Seniors: The James L. Brulte Senior Center in Rancho Cucamonga is one of the largest and most active senior centers in the Inland Empire. Amenities for seniors include a gym, computer lab, themed dances, classes in fitness, music, dance, arts and crafts, and more, a weekday nutrition program, multi-day trips, a volunteer program, a homebound seniors program, over 30 various club meetings, and a weekly senior cinema (Rancho Cucamonga 2020i).

- Human Services: The Community Services Department coordinates with non-profit social service groups that provide aid to the Rancho Cucamonga community through the RC Resource Center. Non-profits services include grief and bereavement support and counseling, parents helping parents classes, the Humanity Center 4 Change which provides youth mental health first aid training Other resources include a food pantry and provisions of emergency and hygiene bags (Rancho Cucamonga 2020j).
- Special Needs: The City offers a variety of recreational and social opportunities for residents with special needs through the Goldy S. Lewis Community Center. Events are organized through the IncredABLES Activities program and include community events like dance parties and special Olympics, which provides free sports training and athletic competitions for children and adults with intellectual disabilities. The Community Center provides coordination services for special needs coalition and support groups (Rancho Cucamonga 2020k).
- Youth: The City offers various programs and services for youth members of the community. These are typically hosted at Lions Center East and Lions Center West and include a youth summer camp, a learning lab, playschool, and teen programs such as afterschool recreational sports, teen cuisine, volunteer coalition, internships, and a babysitter's workshop (Rancho Cucamonga 2020).
- Housing Services: The City provides housing services for individuals, families, and seniors. These include a housing rehabilitation program, a homeownership assistance and housing choice voucher program, temporary housing and food pantry services, homeless and food pantry services, a senior nutrition program, assistance for families victimized by domestic violence, a mobile home accord, and resources on how to report nursing home abuse (Rancho Cucamonga 2020m).
- Armed Forces Banner Program: The City of Rancho Cucamonga established the Armed Forces Banner Program in November 2005 to honor and recognize hometown active-duty military personnel and those local men and women have paid ultimate sacrifice while serving our country. The City has created an application process to obtain a military banner for all residents of the city (Rancho Cucamonga 2020n).

5.16.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

5.16.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The City's General Plan identifies potential recreation impacts due to implementation of the proposed project. and methods to minimize the effects to recreational facilities. The following General Plan policies are applicable to the proposed Project:

Land Use and Community Character

- **GOAL LC-1:** A CITY OF PLACES. A beautiful city with a diversity and balance of unique and well connected places.
- LC-1.1: Complete Places. Ensure that a broad range of recreational, commercial, educational, and civic amenities are nearby and easily accessible to residents and workers in each neighborhood and each employment district.
- LC-1.3: Quality of Public Space. Require that new development incorporate the adjacent street and open space network into their design to soften the transition between private and public realm and creating a greener more human-scale experience.
- LC-3.2: Community Benefit. Require a community benefit and economic analysis for large projects that abut existing neighborhoods or for any project at the maximum density, with a focus on resolving physical, economic, and aesthetic impacts.
- LC-3.3: Community Amenities. Balance the impacts of new development, density, and urbanization through the provision of a high-level of neighborhood and community amenities and design features.
- **GOAL LC-4: COMPLETE NEIGHBORHOODS.** A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.
- LC-4.2: Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining residential or commercial development and provide for future connections into any adjoining vacant parcels.

Open Space

- **GOAL OS-1: OPEN SPACE.** A complete, connected network of diverse parks, trails, and rural and natural open space that support a wide variety of recreational, educational and outdoor activities.
- **OS-1.1: Equitable Access to Parks.** Strive to ensure that at least one park or other public open space is within 1/2 mile or a 10-minute walk from homes and jobs, without crossing major streets except at signalized crossings.

- **OS-1.2: Underserved Communities.** Prioritize the provision of new trails, parks, plazas, and other open space types in areas of the city that are underserved by parks, services, and amenities.
- **OS-1.3:** Accessible Parks. Require parks be designed with special attention to usability by and safety for small children, seniors, and those with mobility, sight, hearing or other special needs.
- **OS-1.4: Design Character and Public Art.** Require neighborhood parks, greens, and playgrounds to be designed as an integral element of their Planning Community, reflecting the design character, art, and culture, of that Neighborhood, Center or District.
- **OS-1.6: New Development.** Ensure that new residential and non residential developments provide adequate on-site recreational and open space amenities consistent with applicable General Plan Designations, and the needs of new development.
- **OS-1.7: New Parks.** Provide adequate park and recreational facilities that meet the City standard of 5.0 acres of parkland (including trails and special facilities) for every 1,000 persons.
- **OS-1.8: Central Park.** Continue to develop Central Park as envisioned in the Central Park Master Plan.
- **OS-1.9: Joint Use.** Pursue and expand joint use of public lands that are available and suitable for recreational purposes, including school district properties and flood control district, water district, and other utility properties.
- **OS-1.10: Buffer Zones.** Provide buffer zones, as appropriate and necessary, to serve as managed open space for wildfire safety and vegetation fuel modification. Buffer zones may include trails, small recreational amenities, information kiosks and signage, and even staging points for fire vehicles.
- **GOAL OS-2: TRAILS.** A complete, connected network of diverse trails and connected open space that improves access to all areas of the city and encourages non-motorized activities.
- **OS-2.1: Trail Corridors.** Extend, improve and complete the multi purpose trail network, wherever possible, by utilizing existing flood control channel and utility corridor rights-of-way as public trail corridors.
- **OS-2.2: Connectivity.** Connect trails in Rancho Cucamonga to trails in the San Bernardino National Forest and other hillside open space areas.
- **OS-2.3: Trailheads.** Provide trailhead amenities such as parking, restrooms, information boards, and maps.

- **OS-2.4: Equestrian Trails.** Continue to maintain and pursue the development of planned trails and facilities for equestrian use.
- **OS-2.5: Utility Corridors.** Preserve the primary function of utility corridors while providing every reasonable opportunity for shared public use for active mobility and recreational purposes.
- **OS-2.7: Access.** Require new development to provide access to existing or future trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities).
- **OS-2.9: Trail and Park Sponsorship.** Support the creation of partnerships with organizations to sponsor and maintain green spaces, parks, trails, and community gardens.

5.16.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.16-1: The proposed project would generate additional residents that would increase the use of existing park and recreational facilities. [Threshold R-1]

Buildout of the proposed project would result in an estimated population of 233,088 residents by 2040, increasing the existing population in the city and SOI from 175,522 in 2020 (DOF). This increase in population would increase the use of existing park and recreational facilities.

Each jurisdiction determines the appropriate park standard based on the guidance provided by Section 666477 of the California Government Code, commonly referred to as the Quimby Act, which requires a standard of 3 acres of parkland per 1,000 residents. The city's park standard is 5 acres of parkland per 1,000 residents and also includes a requirement for open space to be within a 10-minute walking distance from homes and jobs.

With 644 acres of existing parks and recreational facilities (including approximately 295 acres of land for recreational use within its Multi-Use Regional and Community Trails), the city currently provides approximately 3.64 acres per 1,000 residents (U.S. Census Bureau 2020). Using the City's established park standard of 3 to 5 acres for every 1,000 residents, between 532.9 and 888.01 acres of parkland would be required to meet the standard based on the current population. With the existing total area of 644 acres of parkland, trails and special use facilities, the city currently exceeds the minimum City standard.

With the annexation of the North Etiwanda Preserve into the city, approximately 4,393 acres of land has been incorporated into the City's jurisdiction. Approximately, 3,565 acres would be maintained as a "Rural/Conservation Area", with existing and planned preserves and hiking trails, and approximately 828 acres would be designated as a "Neighborhood Area", in which the open space character of the foothills would extend into the neighborhoods. With the inclusion of the recently acquired North Etiwanda Preserve into the City's jurisdiction, there is

more than adequate publicly available recreational land within the city and its SOI to satisfy recreational opportunities for local residents (Rancho Cucamonga 2019).

In summary, the majority of the park needs of the additional growth anticipated under buildout of the General Plan Update would be accommodated by the existing parkland in the city and SOI. The remaining parkland would be accommodated by the numerous availabilities of other park and recreational facilities in the city such as trails, special use and community parks, recreational programs and amenities, joint-use school facilities, and accessible natural preserve and open space areas within the newly acquired Etiwanda Heights Neighborhood and Conservation Area to serve the proposed residents. Furthermore, new development under the General Plan would be required to pay in-lieu fees and/or dedicate parkland to provide 5 acres of parkland. The availability of new facilities would prevent the accelerated physical deterioration of existing facilities. Therefore, impacts would be less than significant. No mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.16-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.16-1 would be less than significant.

Impact 5.16-2: Project implementation would result in environmental impacts to provide new and/or expanded recreational facilities. [Threshold R 2]

Based on the city of Rancho Cucamonga's projected population growth, as well as the city's availability of funds, portions of undeveloped land would be improved as parks and recreational facilities. These facilities would provide residents with new recreational opportunities while striving for the city's parkland standard of 5 acres per 1,000 residents within a 10 minute walk of homes and jobs. Parks are also a permitted use under other land use designations (e.g. residential or professional office land uses), which could result in the development of additional parkland opportunities outside of park-designated parcels.

The development and operation of future new or expanded parks and recreational facilities may have an adverse physical effect on the environment. These adverse physical effects include impacts to air quality, biological resources, lighting, noise, and traffic, among others. Environmental impacts associated with the construction of new and/or expansions of existing recreational facilities in accordance with the proposed land use plan are addressed in the other technical sections of this Draft EIR. Construction-related air quality and noise impacts of the proposed project are described in Section 5.3, *Air Quality*, and Section 5.13, *Noise*, respectively. Addressing the site-specific impacts of these parks at this time would be beyond the scope of this programmatic EIR. Subsequent environmental review for individual park developments would be required. Further, potentially adverse impacts to the environment that may result from the expansion of parks and recreational facilities pursuant to buildout of the proposed land use plan would be reduced with the implementation of the General Plan Updates' goals

and policies, and implementation actions and existing federal, state, and local regulations. Consequently, the proposed General Plan Update would not result in impacts relating to new or expanded recreational facilities beyond those disclosed in this Draft EIR. This impact is less than significant and no additional mitigation related to the construction or maintenance of parks is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.16-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.16-2 would be less than significant.

5.16.5 CUMULATIVE IMPACTS

While some of the city's recreational facilities could be used by persons not residing in Rancho Cucamonga, the geographic area for the cumulative analysis of recreational facilities and parks is the city of Rancho Cucamonga and its SOI. Currently there are 644 acres of parkland in the city, while the city's parkland standard would require between 613 to 1,021.5 acres to satisfy the 2040 population forecast of 204,300 within the city.

Based on the demand for parkland and recreational facilities, future residential development in the city, and including other proposed residential development, would contribute to the cumulative need for more recreational open space and park facilities generated by the increase in residents. With the annexation of the North Etiwanda Preserve into the city, approximately 4,393 acres of land has been incorporated into the city's jurisdiction. Approximately, 3,565 acres would be maintained as a "Rural/Conservation Area", with existing and planned preserves and hiking trails. With the inclusion of the recently acquired North Etiwanda Preserve into the city's jurisdiction, in combination with the numerous availabilities of other park and recreational facilities in the city such as trails, special use and mini parks, recreational programs and amenities, and joint-use school facilities, there is more than adequate publicly available recreational land within the city and its SOI to satisfy recreational opportunities for local residents (Rancho Cucamonga 2010, Rancho Cucamonga 2019).

The city has several regulations developed to address funding for parkland and park improvements. These regulations include Section 66477 of the California Government Code (the Quimby Act), Chapter 16.32 of the RCMC that requires the dedication of land, payment of an in-lieu fee, or a combination of both for the provision of parks and recreational facilities for new residential developments. In addition, Chapters 3.52 and 3.68 of the RCMC would require residential developers to pay established Development Impact Fees for community and recreation centers, and park facilities. The City's Development Impact Fee Study outlines that revenue from those impact fees may be used for land acquisition and site improvements; building construction/expansion; interior building improvements; furniture, fixtures and equipment; exercise, sports and play equipment; special needs equipment; technical centers; aquatic facilities; amenities for picnics, sports, equestrians, and canines; playground equipment; amphitheaters; shelters; building/structural exterior and interior improvements; and transportation facilities. By adhering to the requirements for provision of parkland and/or payment of Development Impact Fees, future and present residential developments in the City would provide parks and recreational facilities to meet the City's parkland standard by allocating sufficient funds and space for future parkland development. Because individual development projects must mitigate their incremental impact on parks and recreational facilities through land dedication or payment of fees, the proposed General Plan Update's contribution to demand for park and recreation services would cumulatively considerable and this would be a less than significant impact.

5.16.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impacts would be less than significant.

5.16.7 MITIGATION MEASURES

No mitigation measures are required.

5.16.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.16.9 REFERENCES

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5.17 TRANSPORTATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Rancho Cucamonga General Plan Update to impact transportation facilities and circulation in the City of Rancho Cucamonga and its sphere of influence (SOI). Cumulative impacts related to transportation would be contiguous with the City and SOI boundary, but also consider regionally.

The analysis in this section is based in part on the following information:

- City of Rancho Cucamonga General Plan Update PLAN RC Community Mobility Existing Conditions Report, May 2020
- Technical assessment completed by Fehr & Peers in support of this Draft EIR
- Requirements outlined in the City's Traffic Impact Study Guidelines.

5.17.1 ENVIRONMENTAL SETTING

5.17.1.1 Regulatory Background

State Regulations

Assembly Bill 1358 (California Complete Streets Act)

Assembly Bill 1358 (AB 1358) or the California Complete Streets Act, was signed into law on September 30, 2008. Since January 1, 2011, AB 1358 has required circulation element updates to address the transportation system from a multimodal perspective. The Act states that streets, roads, and highways must "meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the General Plan." The Act requires a circulation element to plan for all modes of transportation where appropriate, including walking, biking, car travel, and transit. In addition, the Act requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled.

Rancho Cucamonga adopted its Complete Streets Ordinance in 2012 to implement the goals of providing complete streets in the city from the 2010 General Plan.

Assembly Bill 32 (Global Warming Solutions Act)

Assembly Bill 32 (AB 32) or the Global Warming Solutions Act was signed into law on September 27, 2006. AB 32 established a comprehensive program to reduce greenhouse gas emissions to combat climate change. This Bill requires the California Air Resources Board (CARB) to develop regulations that reduce greenhouse gas emissions to 1990 levels by 2020. On January 1, 2012, the greenhouse gas rules and market mechanisms, adopted by CARB, took effect and became legally enforceable. The reduction goal for 2020 is to reduce greenhouse gas emissions by 25 percent of the current rate in order to meet 1990 levels, and a reduction of 80 percent of current rates by 2050. The AB 32 Scoping Plan contains the main strategies California will use to reduce the greenhouse gases. The scoping plan has a range of greenhouse gas reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms, and an

AB 32 program implementation regulation for funding. In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. CARB recognizes cities as "essential partners" in reducing greenhouse gas emissions. The Air Resources Board has developed a Local Government Toolkit with guidance for GHG reduction strategies such as improving transit, developing bicycle/pedestrian infrastructure, increasing city fleet vehicle efficiency, and other strategies. The City of Rancho Cucamonga is currently striving to comply with AB 32 and implement greenhouse gas reduction strategies into the City's General Plan by adopting the Complete Streets Ordinance in 2012 and publishing Sustainable Community Action Plan in 2018. SBCTA is also undertaking several initiatives including transit investments, technology-enabled multimodal action plan, Transit-Oriented Development (TOD) planning, countywide active transportation investment, etc. which intends to comply with the statewide reduction targets.

Senate Bill 375 (Sustainable Communities and Climate Protection Act)

Senate Bill 375 (SB 375) or the Sustainable Communities and Climate Protection Act, provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal is to reduce the number and length of automobile commuting trips, helping to meet the statewide targets for reducing greenhouse gas emissions set by AB 32.

SB 375 requires each MPO to add a broader vision for growth to its transportation plan — called a Sustainable Communities Strategy (SCS). The SCS must lay out a plan to meet the region's transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land-use, and housing policies to plan for achievement of the emissions target for each region. The SCAG Regional Transportation Plan (RTP) and SCS were adopted in 2016.

For consistency with the regional planning objectives of the SCS, consideration of ways to achieve the following is needed as part of the General Plan Update process:

- Support transit-oriented development;
- Support mixed-use development, which improves community walkability;
- Improve jobs-to-housing ratio;
- Promote land use patterns that encourage the use of alternatives to single-occupant automobile use;
- Apply Transportation System Management (TSM) and Complete Streets practices to arterials to maximize efficiency;
- Improve modes through enhanced service, frequency, convenience, and choices; and
- Enhance Transportation Demand Management (TDM) practices to reduce barriers to alternative travel modes and attract commuters away from single-occupant vehicle travel.

Senate Bill 743 (SB 743)

Senate Bill 743 (SB 743) was signed into law on September 27, 2013, and has the potential to fundamentally change the traditional transportation impact analyses conducted as part of the CEQA process. According to this bill, traffic impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area will not be considered significant. Also, residential, mixed-use, and employment center projects meeting specific

criteria would be exempt from CEQA. Furthermore, for the CEQA process, this bill eliminates measures such as auto delay, level of service (LOS), and other vehicle-based measures of capacity in many parts of California. Instead, other measurements such as vehicle miles travelled (VMT) are to be utilized to measure impacts.

The purpose of SB 743 is to balance the needs of congestion management, infill development, public health, greenhouse gas reductions, and other goals. The Office of Planning and Research released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018. Rancho Cucamonga lead the countywide effort to develop the SB 743 implementation study, a guiding document for VMT analysis methodology, thresholds, and mitigation strategies for transportation impact evaluation for SBCTA agencies.

The City of Rancho Cucamonga adopted their VMT thresholds on June 18th, 2020 through resolution number 2020-056 and are memorialized in the City's Traffic Impact Analysis Guidelines (Fehr & Peers, June 2020).

Regional Regulations

San Bernardino County Congestion Management Program (CMP)

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California, including San Bernardino County within which the City of Rancho Cucamonga is located, to prepare a Congestion Management Plan (CMP). Updated by SBCTA in 2016, the CMP is an effort to align land use, transportation, and air quality management efforts in order to promote reasonable growth management programs that effectively use statewide transportation funds, while ensuring that new development pays its fair share of needed transportation improvements.

The focus of the CMP is the development and coordination of a multimodal transportation system across jurisdictional boundaries, incorporating the goals from SCAG RTP/SCS. Per the Level of Service adopted by SBCTA, when a CMP segment falls to "F," a deficiency plan must be prepared by the local agency where the deficiency is located. The plan must contain mitigation measures, including Transportation Demand Management (TDM) strategies and transit alternatives, and a schedule of mitigating the deficiency. It is the responsibility of local agencies to consider the traffic impacts on the CMP when reviewing and approving development proposals.

It should be noted that SB 743 provides the option for local agencies to opt out of the CMP individually due to the outdated regulatory nature of CMP. The following facilities are designed CMP facilities in or serving the City:

- I-10
- I-15
- SR-210
- 19th Street
- Base Line Road
- Foothill Boulevard

- Arrow Route
- 4th Street
- Archibald Avenue
- Haven Avenue
- Milliken Avenue

Regional Transportation Plan (RTP)

The Regional Transportation Plan (RTP) is prepared by SCAG for the six-county SCAG region. This long-range transportation plan (approximately 20-year horizon) projects population and employment growth and defines the vision and overall goals for the regional multimodal transportation system. The RTP identifies future transportation infrastructure needs and defines planned multimodal transportation improvements, including freeways, highoccupancy vehicle facilities, bus and rail transit, freight movement, and aviation. This plan therefore sets the framework for the regional transportation infrastructure system that services Rancho Cucamonga.

Caltrans VMT-Focused Transportation Impact Study Guide (TISG)

The Caltrans VMT-Focused Transportation Impact Study Guide (TISG) provides a starting point and a consistent basis on which Caltrans evaluates traffic impacts to state highway facilities. The Guide was adopted on May 20, 2020, and provides guidance to Caltrans Districts, lead agencies, tribal governments, developers and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies and it is intended to be a reference and informational document.

Measure I 2020-2040 Strategic Plan

First approved in 1989 and extended in 2004 by the voters, Measure I is the half-cent sales tax collected throughout San Bernardino County for transportation improvements. Administered by SBCTA, the Measure I 2010-2040 Strategic Plan is the official guide for the allocation and administration of the combination of local transportation sales tax, State and Federal transportation revenues, and private fair-share contributions to regional transportation facilities to fund delivery of the Measure I 2010-2040 transportation programs. The strategic plan identifies funding categories, allocations, and planned transportation improvement projects in the County for freeways, major and local arterials, bus and rail transit, and traffic management systems. For the fiscal years 2018-2019 through 2022-23, Rancho Cucamonga has identified improvements worth approximately \$19 million in funding for pavement rehabilitation projects, citywide Americans with Disabilities Act (ADA) corrective measures, and signal and striping maintenance, etc. These improvements are planned to be funded through the Measure I Local Streets Program. It is to be noted that the five-year Capital Improvement Program (CIP) is over programmed to allow use of this funding source if additional funding is available during the five-year planning period.

San Bernardino County Long-Range Transit Plan

SBCTA updates its Long-Range Transit Plan (LRTP) to address transit needs for an approximate 25-year horizon. The LRTP prioritizes goals and projects for transit growth. With the passage of SB 375 by the State legislature in 2008, the LRTP has been modified to more closely tie land use and transportation planning strategies. The LRTP addresses countywide travel challenges and creates a system aimed to increase the role of transit in future travel choices. The LRTP anticipates that a premium transit service, such as rapid buses and rail modes, will offer solutions to future travel demands by providing competitive travel times and increased reliability, mobility, and accessibility. Premium transit will reduce dependence on cars, encourage community revitalization, and encourage more balanced transit-oriented land use development.

SBCTA Non-Motorized Transportation Plan

SBCTA published its Non-Motorized Transportation Plan (NMTP) in 2011 and revised in 2018, with the vision of creating a safe, interconnected cycling and walking system in the County. Supplemented by local jurisdiction inventory data, the plan provides both regional and city-level recommendations, and the jurisdictions are responsible for the implementation of the plan.

SBCTA Development Mitigation Nexus Study

The SBCTA Development Mitigation Nexus Study identifies the fair share contributions from new development for regional transportation improvements (e.g., freeway interchanges, railroad grade separations, and regional arterial highways). The Nexus Study is updated biennially or as requested by SBCTA Board of Directors and in close coordination with local jurisdictions.

Local Regulations

Circulation Master Plan for Bicyclists and Pedestrians

The City of Rancho Cucamonga published a Circulation Master Plan for Bicyclists and Pedestrians in May 2015. The Circulation Plan calls for an increase in bicycling and walking to enhance the livability, health, transportation, and economic development. In addition to developing a connected network, the Plan also recommends bicycle programs to improve facilities that can make it safer for users of all ages and abilities to ride a bicycle on city streets. The Plan developed bicycle facilities network recommendations as well as additional suggestions on improving bike facilities, intersections, bicycle sharing, wayfinding, bicycle parking, end-of-trip amenities, etc. The recommended pedestrian improvements included sidewalk gap closures and high priority segments. Trail implementation recommendations included wayfinding, high visibility crosswalks, sidewalk furniture, etc. Educational programs were recommended to create awareness about biking and walking among different ages and abilities.

City of Rancho Cucamonga Municipal Code

The Municipal Code includes regulations and standards that govern traffic, parking and loading, and development in the City of Rancho Cucamonga. Title 10, Vehicles and Traffic, includes regulations on traffic enforcement regulations, pedestrian rights, electric vehicle parking, and truck routes.

City of Rancho Cucamonga VMT Thresholds

The City of Rancho Cucamonga Traffic Impact Analysis Guidelines (Fehr & Peers, June 2020) identify methodologies and approaches for assessing VMT for project impact determination. It specifically identifies the following significance criteria to be applied:

A project would result in a significant project generated VMT impact under either of the following conditions:

- 1. The Baseline project generated VMT per service population exceeds the City of Ranch Cucamonga baseline VMT per service population, or
- 2. The Cumulative project generated VMT per service population exceeds the City of Rancho Cucamonga baseline VMT per service population.

The projects impact on VMT would also be considered significant if it resulted in the following condition:

1. The cumulative link-level boundary VMT per service population with the City of Rancho Cucamonga increases under the plus project condition compared to the no project condition.

Standard Conditions of Approval

There are existing regulations that reduce impacts to transportation facilities and circulation. Compliance by existing and future development and redevelopment with these standard conditions would reduce the potential for impacts on transportation facilities and circulation in the City. Existing regulations that reduce impacts on transportation facilities and circulation include those standard conditions listed below.

- 5.17-1: Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.
- **5.17-2:** Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register with the SCAQMD to implement an emission reduction program, in accordance with this Rule.
- **5.17-3:** Individual projects shall provide the following, as determined applicable by City staff:
 - Provide car-sharing, bike sharing, and ride-sharing programs;
 - Improve or increase access to transit;
 - Incorporate neighborhood electric vehicle networks into the project;
 - Include project measures to reduce transportation requirements such as work from home and flexible work schedules;
 - Link to existing pedestrian or bicycle networks, or transit service; and/or
 - Provide traffic calming.

5.17.1.2 Existing Conditions

Existing VMT

VMT was estimated for the proposed General Plan using the local travel demand forecasting model. In San Bernardino County, that model is the San Bernardino Traffic Analysis Model (SBTAM) which was originally developed in 2012 but has continued to undergo updates to the land use and transportation network to reflect the most recent SCAG RTP/SCS program. The model began as the SCAG regional travel demand forecasting model but underwent a subarea model development to add detail and refinement within San Bernardino County. The SBTAM model used for this effort had an updated base year land use that reflected a 2016 base year and a 2040 future year. Added refinement to the model occurred through the development of a new 2018 base year that reflected a land use review with improved accuracy and a review of the transportation network.

The 2018 base year model was used to estimate VMT in the City. There are a variety of methodologies used to estimate VMT. These methods are described in detail below:

Boundary Method. Multiplies the volume on each roadway segment by the segment length within a specified geographic boundary defined by the user. This method includes on trips on the roadway within that boundary, without discriminating where the trip began or ended. The boundary method is used to understand the "project's effect" on VMT, which is inclusive of trips within the boundary that may take longer routes due to congestion along corridors. It should also be noted that the boundary utilized in the assessment needs to be big enough to capture the influence area of a project, but small enough such that other model "noise" outside the study area doesn't skew the results from being meaningful. In Rancho Cucamonga, the City boundary is typically used for the Boundary Method assessment.

Full Accounting Method. This method utilizes the model's origin-destination trip tables (e.g. trip generation) and multiplies them by the vehicle assignment skim matrices (e.g. trip length) to estimate VMT. Using this method, we include all trips that have at least one trip end within the city and include the entirety of the trip length. This method is used in the "project generated" VMT assessment and includes VMT generated within the City out to the external stations of the model. Given that the SBTAM model includes all of San Bernardino, Riverside, Orange, Los Angeles, Ventura, and Imperial counties, and that the City of Rancho Cucamonga is generally centered within that geographic region, it generally captures the bulk of the VMT generated by the project, but the model does have a limitation in that trips leaving the model boundary are truncated.

<u>RTAC or ½ Accounting Method.</u> This method is similar to the Full Accounting Method described above, but "allocates" half of the VMT for any trip that begins or ends outside the city (the other half gets allocated to the other city).

It is important to understand these different methods as VMT reported from each method will be different due to the differences in their methodologies. The VMT utilized in this transportation chapter is based on the Boundary Method and the Full Accounting Method; although the GHG assessment typically utilizes the RTAC Method. Existing (2018) Full Accounting VMT is summarized in Table 5.17-1 as is the existing population and employment. Table 5.17-1 also summarizes the Countywide metrics as well as the model wide metrics (e.g. SCAG region) for comparative purposes. VMT was also "normalized" by dividing it by the sum of population and employment (referred to as Service Population (SP)) which will be used to identify potential impacts associated with the proposed General Plan, but also allows VMT to be reviewed as a metric of transportation efficiency.

Table 5.17-1 Existing (2018) City VMT

Location	Population	Employment	VMT	VMT/Service Population
City of Rancho Cucamonga	176,274	89,717	9,875,814	37.1
San Bernardino County	2,140,813	791,973	113,072,928	38.6
Model Wide (e.g. SCAG region)	18,390,430	7,557,562	851,111,279	32.8

Existing Street System

Regional Highways

Interstate 10

I-10 is located approximately 0.7 miles south of the city limit and provides east-west connectivity to surrounding metropolitan areas. The major interchanges on I-10 that serve the city are provided via major north/south arterials including Vineyard Avenue, Archibald Avenue, Haven Avenue, Milliken Avenue, and Etiwanda Avenue.

Interstate 15

I-15 extends through the southeastern area of the city and along its northeastern City limit with key arterial interchanges at Beech Avenue, Base Line, Road, Foothill Boulevard, and 4th Street.

State Route 210

State Route 210 (SR-210) runs through the northern portion of the city, with interchanges located at Carnelian Street, Archibald Avenue, Haven Avenue, Milliken Avenue, and Day Creek Boulevard.

Local Circulation

Roadway Hierarchy

The 2010 Rancho Cucamonga General Plan outlines a roadway hierarchy with three types of facilities: Primary Travel Corridors, Secondary Travel Corridors, and Tertiary Corridors. These roadway types are used as a general description to under the movement of people and vehicles, and to identify connections to the transit and bicycle networks. Table 5.17-2, *General Roadway Hierarchy Types*, identifies the roadway types within the city. Figure 5.17-1, *General Roadway Hierarchy Types*, shows the roadway types within the city.

Туре	Description	Features	Streets
Primary Travel Corridors	Traverses the City and extends beyond the City limits to connect to freeways and adjacent communities.	Total Lanes: 6 ADT: 30,000-40,000	 Foothill Boulevard 4th Street Haven Avenue Milliken Avenue
Secondary Travel Corridors	Extends across the entire City and in most cases, connects with freeways and extends to other communities.	Total Lanes: 4-6 ADT: 20,000-30,000	 Base Line Road Arrow Highway Carnelian Street/ Vineyard Avenue Archibald Avenue Day Creek Boulevard
Tertiary Travel Corridors	Supports and provides access to primary and secondary corridors, and are more locally oriented and locally traveled.	Total Lanes: 2-4 ADT: 10,000-15,000	 Wilson Avenue Church Street Banyan Street 6th Street 19th Street Hermosa Avenue Rochester Avenue Etiwanda Avenue East Avenue

 Table 5.17-2
 General Roadway Hierarchy Types

Roadway Classifications

Functional classifications of roadway networks categorize streets by purpose, location, and typical land uses to which they provide. In Rancho Cucamonga, the local street system is organized into a hierarchy of eight roadway types according to the Circulation Plan from 2010 Rancho Cucamonga General Plan. These nine types are Local Streets, Collector Streets, Modified Collector Streets with Median, Secondary Streets, Modified Secondary Streets with Median, Major Arterials, Modified Major Arterials with Median, Major Divided Arterials, and Major Divided Highways, as shown in Figure 5.17-2, *Roadway Classifications*.

The current roadway classifications Rancho Cucamonga uses are typical throughout the state, but the current structure focuses only on vehicle travel. The Complete Streets Act (AB 1368) requires that California communities consider all modes of travel when planning the transportation system.

Pavement Conditions

The SCAG 2016-2040 RTP/SCS measures the pavement conditions of both local roads and highway systems by county. The condition of the roadway pavement is important to consider for safety and positive driver experience. Pavement Condition Index (PCI) is the standard of practice measure of effectiveness used to assess pavement where 100 is the best score and 0 is the worst:

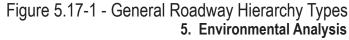
- Very Good (86-100 PCI) Pavements with little or no distress.
- **Good** (70-85 PCI) Pavements with some distresses that are predominately non-load related. The pavement structure is sound and minor oxidation may occur.
- **Fair** (50-69 PCI) Pavements with a significant level of distress, which may be predominantly load-related. The pavement structure is becoming deficient.
- Poor (30-49 PCI) Pavements with moderate to severe surface distresses. Extensive weathering, block cracking, and load-related distresses such as alligator cracking and rutting may occur.
- **Very Poor** (0-29 PCI) Pavements with severe weather-related distresses as well as large quantities of load-related distresses. The pavement is nearing the end of its service life.

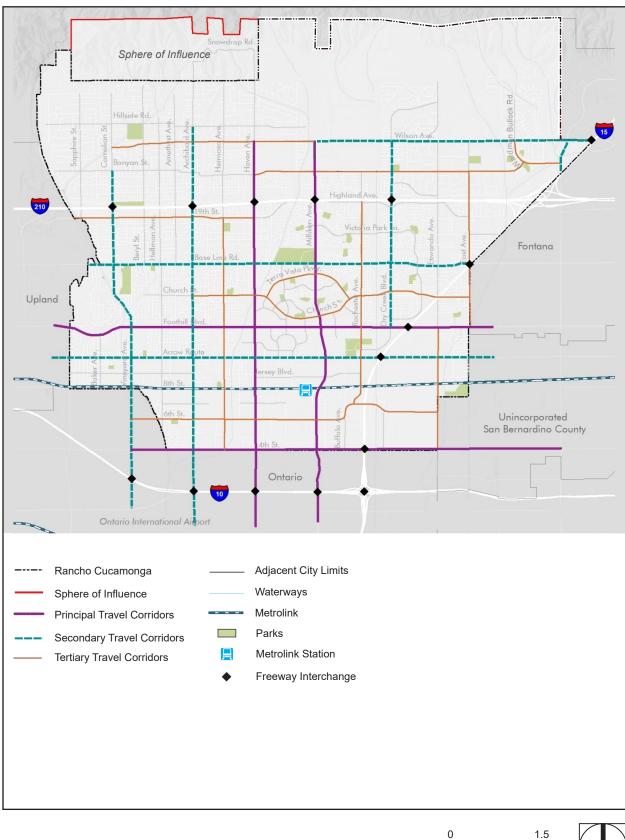
Table 5.17-3, *Pavement Network Summary (2018)*, summarizes the specific pavement conditions throughout Rancho Cucamonga arterials, collectors, and local residential streets. The City's overall weighted PCI for pavement network in 2018 is approximately 72 which is in the "Good" category.

Functional Class	Centerline Mileage	Lane Miles	Pavement Area (SF)	% Pavement Area	Weighted Average PCI
Arterial	78.3	246.4	20,552,906	20%	76
Secondary	36	137.1	10,450,541	10.2%	77
Collector	51	102.1	11,531,649	11.3%	75
Industrial	16.6	33.1	3,421,217	3.3%	65
Local	316.1	633.5	56,489,263	55.1%	66
Total	498	1,152.2	102,445,576	99.9	71.8 (Average)

Table 5.17-3 Pavement Network Summary (2018)

Source: City of Rancho Cucamonga, 2015

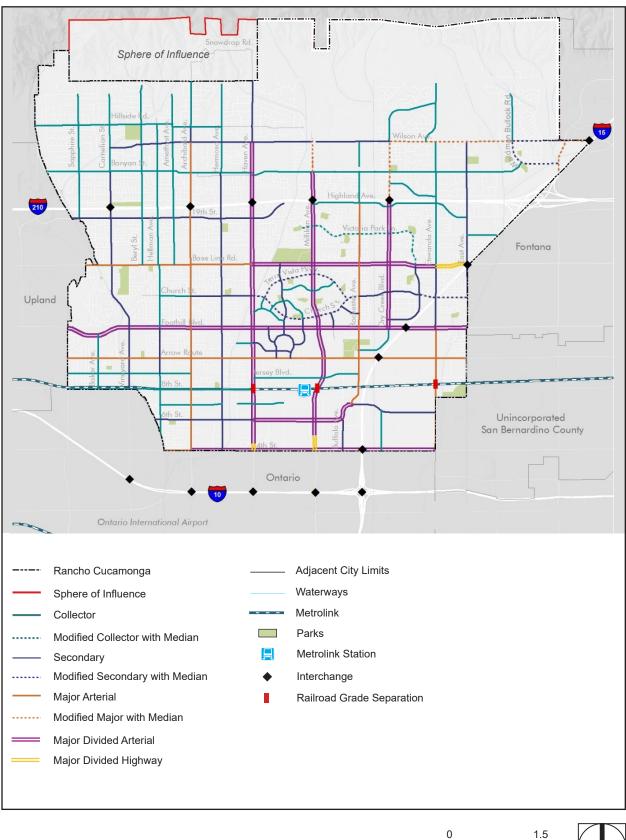


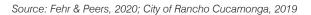


Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2020; SCAG, 2020; County of San Bernardino, 2020



Figure 5.17-2 - Roadway Classifications 5. Environmental Analysis





Major Roadway Improvement Projects

According to the SCAG 2016 RTP/SCS approved project list of Federal Transportation Improvement Program (FTIP), several roadway improvements are planned in the City of Rancho Cucamonga, as shown in Table 5.17-4, *Major Improvement Projects (2016)*. The projects are listed by state highway, local highway, and transit.

Please note that the proposed General Plan Update would remove the I-15/Arrow Route interchange and, as such, it has been excluded in this environmental document.

System	Route Name	From	То	Description	Completion Year
State Highway	1-15	Arrow Route	Foothill Boulevard	I-15 at Arrow Route – construct new interchange between Arrow Route and Foothill Boulevard	2040
Transit	Ontario Airport Shuttle	Rancho Cucamonga Metrolink Station	Ontario Airport	Direct shuttle bus connection from Rancho Cucamonga Metrolink station to Ontario Airport	2020
	East Ave	Wilson Ave	North Rim Way (New)	Widen East St from Wilson Ave to North Rim Way (new) from 2 to 4 lanes	2025
	Etiwanda Ave	Existing Terminus	North Rim Way (New)	Widen Etiwanda Ave from existing terminus to north rim way (new) from 0 to 2 lanes	2025
	Victoria Ave	Etiwanda High School	1-15	Widen Victoria Ave from Etiwanda High School to i-15 from 2 to 4 lanes	2025
	Etiwanda Ave	Miller Ave	850' N/O Miller Ave	Widen Etiwanda Ave from Miller Ave to 850' n/o Miller Ave, northbound only from 3 to 4 lanes	2025
Local Highway	6th St	6th St	Cucamonga Creek Channel	Widen 6th St at Cucamonga Creek Channel from 2 to 4 Ianes (50% Rancho Cucamonga/50% Ontario)	2025
	Baseline Rd	Etiwanda Ave	Shelby Pl	Widen Baseline Rd from Etiwanda Av to i-15 from 4 to 6 lanes	2025
	East Ave	Chateau Dr	Victoria Ave	Widen East Ave from Chateau Dr to Victoria Ave from 2 to 4 lanes	2025
	Arrow Route	Etiwanda Ditch	Arrow Route @ Etiwanda Ditch	Widen Arrow Route at Etiwanda ditch from 2 to 4 lanes	2025
	Hellman Ave	Cucamonga Creek Channel	Hellman Ave @ Creek Channel	Widen Hellman Ave at Cucamonga Creek Channel (50%rc, 50% Ontario) from 2 to 4 lanes	2025

 Table 5.17-4
 Major Improvement Projects (2016)

City of Rancho Cucamonga General Plan Update Draft EIR 5. ENVIRONMENTAL ANALYSIS 5.17 TRANSPORTATION

System	Route Name	From	То	Description	Completion Year
	Arrow Route	Grove St	Baker St	Widen Arrow Route from Grove St to Baker St from 2 to 4 lanes	2025
	Etiwanda Ave	Banyan	Wilson Ave	Widen Etiwanda Ave from Banyan Rd to Wilson Ave from 2 to 4 lanes	2025
	Church Ave	Archibald Ave	Haven Ave	Widen Church Ave from Archibald Ave to Haven Ave from 2 to 4 lanes	2025
	Foothill Blvd	Archibald Ave	Hermosa Ave	Widen Foothill Blvd from Archibald Ave to Hermosa Ave from 4 to 6 lanes	2025
	Miller Rd	Etiwanda Ave	East St	Widen Miller Rd from Etiwanda Ave to East St from 2 to 4 lanes	2025
	Foothill Blvd	Vineyard Ave	Archibald Ave	Widen Foothill Blvd from Vineyard Ave to Archibald Ave from 4 to 6 lanes	2025
	Etiwanda Ave	6th St	Arrow Route	Widen Etiwanda Ave from 6th St to Arrow Route from 2 to 4 lanes	2025
	Wilson Ave	Milliken Ave	Day Creek Blvd	Widen Wilson Ave from Milliken Ave to Day Creek Blvd from 0 to 4 lanes	2025
	Wilson Ave	Wilson Ave	Day Creek Channel	Construct new 4-lane (2 each direction) Bridge at Wilson and Day Creek Channel	2025
	Etiwanda Ave	Etiwanda Ave	@SCRRA	Construct Grade Separation for Etiwanda Ave @ Southern California Regional Rail Authority tracks with overhead roadway	2025
	Youngs Canyon Rd	San Sevaine	Cherry Ave	Construct new 4-lane divided Youngs Canyon Rd from San Sevaine to Cherry Ave	2026
	Cherry Ave	South Rancho Cucamonga City Limits	Wilson Ave	Widen Cherry Ave from South Rancho Cucamonga City limits to Wilson Ave from 2 to 4 lanes	2021
	Grove Ave	San Bernardino Rd	Foothill Blvd	Widen Grove from San Bernardino Ave to Foothill Blvd from 1 to 2 lanes (East side only)	2025
	Arrow Route	Etiwanda Ave	East City Limits	Widen Arrow Route from Etiwanda to East Rancho Cucamonga City limit from 2 to 4 lanes	2035

Near-Term Capital Improvement Program Projects

The City's Capital Improvement Program (CIP) includes both streets and traffic projects that include updates to the vehicle, bicycle, and pedestrian networks. The CIP includes funding for pre-construction activities such as feasibility studies and design, as well as construction funding. The proposed network improvements in Rancho Cucamonga with construction funding in the 2019-2020 CIP include:

General

- Advanced Traffic Management System (ATMS)
- At-grade railroad crossing improvement at 6th Street
- Grade separation on Etiwanda Avenue

Roadway

- Pavement rehabilitation at various locations
- ADA ramp installations at various locations

Transit

- Metrolink station improvements
- Sidewalk Improvements for Bus Stops

Bicycle and Pedestrian

- 6th Street Cycle Track and Milliken Avenue Bike Lane
- 9th Street northside west of Vineyard Avenue-Sidewalk Improvements
- Barrier Replacement at Flood Control Entrance/Exit
- Day Creek Channel Bike Trail
- Milliken Avenue Underpass-Sidewalk Expansion
- Pacific Electric Trail drainage improvements
- School crosswalk improvements
- Southeast Corner Foothill Boulevard and Etiwanda Avenue-Sidewalk Survey

Transit

Public transportation is a vital part of the circulation system within Rancho Cucamonga. Transit expands mobility options to citizens who may not be able to afford or physically operate other means of travel, while some choose not to drive. Figure 5.17-3, *Transit Facilities*, shows the transit options in Rancho Cucamonga. Intercity buses, local buses, and demand-responsive service are provided; all of which help people move.

Bus Transit

OmniTrans

Majority of the available public transportation is provided by OmniTrans via fixed route bus services. OmniTrans is the public transportation agency in San Bernardino County that provides seven bus routes within the City of Ranhco Cucamonga. These routes connect to the Rancho Cucamonga Metrolink Station, Civic Center, Chaffey College, Ontario International

Airport, Victoria Gardens, and the surrounding Cities of Fontana, Upland, Ontario, Montclair, and Chino.

Major City bus routes include routes 66, 67, 80, 81, 82, 85, and 86. As shown in Figure 5.17-3, the bus routes run primarily along Haven Avenue, Day Creek Boulevard, Milliken Avenue, Carnelian Street/Vineyard Avenue, Base Line Road, Foothill Boulevard, and Arrow Route, and along parts of Banyan Street, Victoria Park Lane, and 4th Street. Two routes originate in the City at Chaffey College and Civic Center and all other routes start and end beyond the City limits. Route 80 serves the Rancho Cucamonga Metrolink Station. The service frequencies for all routes during peak hours on weekdays are as follows:

- Route 66: 15-30 minutes
- Route 81: 60 minutes
- Route 82: 60 minutes
- Route 85: 60 minutes
- Route 86: 60 minutes

Access

OmniTrans also provides a demand-response service called Access, which is a curb-to-curb van service for people unable to independently use the fixed-route service. This service complies with the requirements of the Americans with Disabilities Act (ADA). Reservations must be made in advance, and pick-up and drop-off must be provided within a three-quarter mile range of the existing OmniTrans fixed bus routes and during the same service hours as those routes.

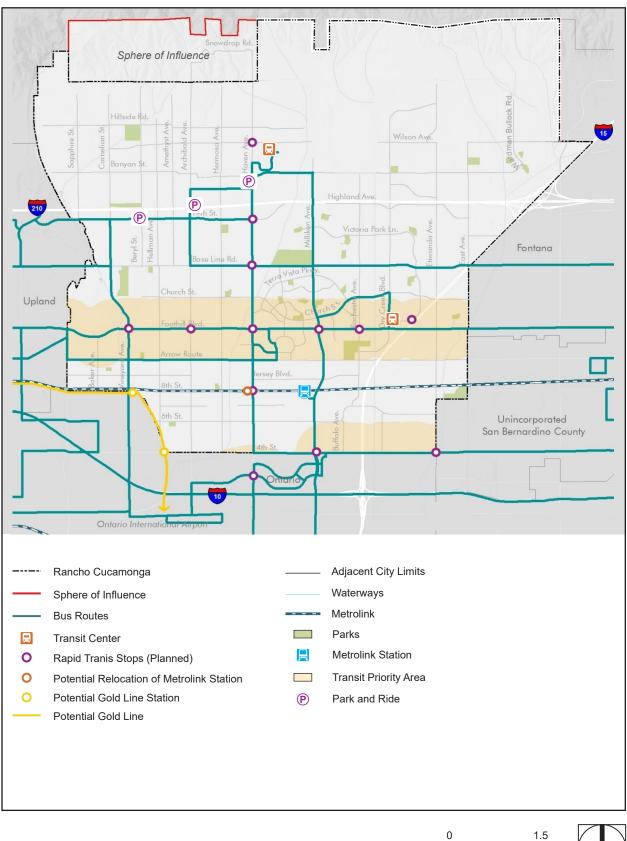
Park-and-Ride Facilities and Parking

The City of Rancho Cucamonga has two park-and-ride facilities located near the SR-210 that are available to commuters. Park-and-ride lots are made possible through partnerships with private property owners, Caltrans, and the SBCTA. Park-and-ride lots are strategically located to serve people who need a place to store their cars while they join a carpool, a vanpool, or use transit. Park and ride lots are valuable resources to the city as they can aid with reducing automobile travel and subsequent emissions, consistent with AB 32.

According to the SCAG 2016 RTP/SCS approved project list, Caltrans has no new park-and-ride facilities planned for the City of Rancho Cucamonga. Currently, no data is available on the composition of the riders who use the park and ride facilities. As part of the General Plan Update, the City of Rancho Cucamonga could designate action items to further study park-and-ride facilities and their uses.

As for parking requirements for individual developments, the City has adopted parking and loading standards by land use, as well as options for shared parking among two or more uses to reduce overall parking supply requirements. Reducing overall parking supplies helps to minimize impervious areas in surface parking lots, and results in more efficient use of land so that portions of parking lots or structures do not sit empty for long periods.

Figure 5.17-3 - Transit Facilities 5. Environmental Analysis



Scale (Miles)

Rail

Metrolink

Metrolink is a commuter rail program operated by the Southern California Regional Rail Authority (SCRRA), providing service from outlying suburban communities to employment centers such as Burbank, Irvine, and downtown Los Angeles. For Rancho Cucamonga, the San Bernardino Line (SBL) train services Metrolink stations in the cities of San Bernardino, Rialto, Fontana, Rancho Cucamonga, Upland, Montclair, Claremont, Pomona, Covina, Baldwin Park, El Monte, and Los Angeles.

The Metrolink 10-Year Strategic Plan (2015-2025) indicates that, through a partnership with Metro, the agency will experiment with lower fares across the board and targeted discounts on shorter distance trips with the goal to increase ridership and revenue. The plan anticipates an increase in regional population and employment in Inland Empire rail lines that includes Rancho Cucamonga.

The Ontario Airport Rail Study, published in 2014, recommended a set of transit alternatives to connect the Ontario International Airport to the City of Rancho Cucamonga. The City Council recently adopted a resolution with preferences for enhanced Metrolink Service to the Ontario International Airport that would utilize the Metrolink.

Metro Gold Line

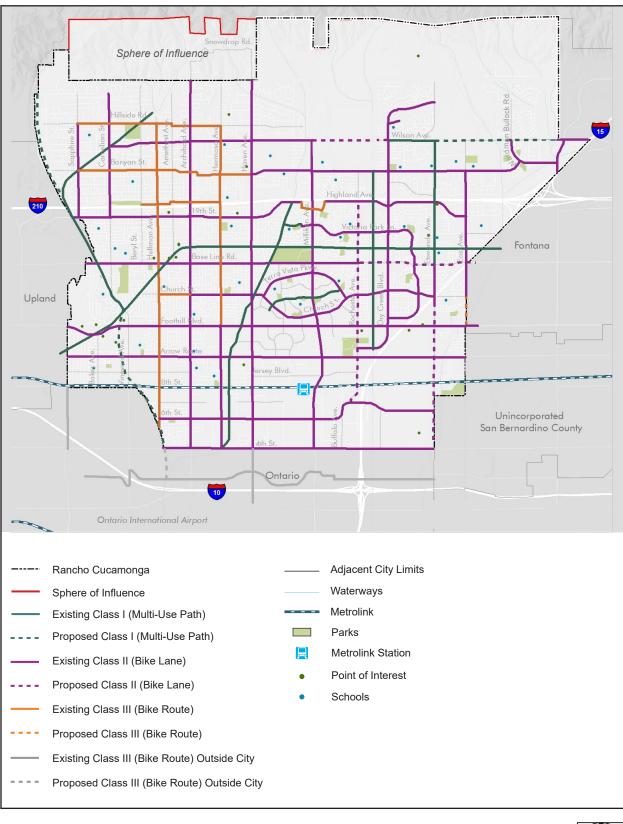
The Metropolitan Transportation Authority of Los Angeles County, or Metro, is responsible for light rail service operations in Los Angeles County, and will extend operations to San Bernardino County with the planned extension of the Gold Line. Plans as of 2020 have the east end of the line terminating in Montclair (with the west end of the line terminating at Los Angeles' Union Station), but ultimate plans include the extension of the Gold Line all the way to Ontario International Airport. This would increase the need to connect Metrolink to the airport to assist in facilitating this connection. Currently, the regional rail connections are eastwest, but there are opportunities to create a regional hub within the Inland Empire by creating north-south connection.

Bicycle Facilities

Bicycle facilities in Rancho Cucamonga consist of bike lanes, routes, trails, and paths, as well as bike parking. The existing and planned bicycle network in the city is shown in Figure 5.17-4, *Existing and Proposed Bicycle Facilities*. On-street facilities are classified into four categories depending on their design and function (Class 1, Class II, Class III, and Class IV).

Although the City has a high network of Class II bikeways, many of these facilities are on high speed, wide roadways that limit rider comfort on the corridors (whereas the bike path system provides a comfortable, low stress biking environment). As such, the General Plan update should consider bicycle comfort and look at increasing the connectivity of low street facilities through street prioritization (e.g., a layered network approach) or through better connections between activity centers and the Class I trails system.





Scale (Miles)

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Trails

The City adopted its Trails Implementation Plan (TIP) in 1991 that provide design and technical guidance for bicycle routes, and hiking and riding trails (collectively referred to as "multipurpose trails). The Trails Advisory Committee, as an advisory body to the Planning Commission and City Council, generally reviews all development applications where trails are required per the TIP, and, when necessary reviews changes to the trails system. The Trail Implementation Plan:

- Provides a more detailed analysis of trail conditions and strategies to address bikeway issues;
- Includes preliminary cost estimates for bikeway construction;
- Identifies funding mechanisms for bikeway implementation;
- Defines the roles of various City Departments in the implementation of bikeway system;
- Addresses horseback riding and hiking trail issues.

The existing multi-purpose trails are mostly in the northern portion of the City (north of SR-210), as shown in Figure 5.17-5, *Trails*. In addition to maintaining the existing trails, the existing flood channels and utility corridors through the City could also provide multimodal active transportation boulevards.

Pedestrian Network

Pedestrian facilities in Rancho Cucamonga consists of sidewalks and crosswalks. Figure 5.17-6, *Pedestrian Facilities*, identifies all the sidewalks in the city. Most residential and commercial developments provide sidewalks on public streets and internal circulation. Areas with no existing sidewalks are mainly located in the northwest, southwest, south, and eastern portions of the city. Overall, Rancho Cucamonga has 76 percent sidewalk coverage in its streets.

Freight and Goods Movement

Truck Routes

Due to its important location between two highways and the role of logistics in the local economy, effectively accommodating goods movement along its roadways is critical for local transportation planning. Truck traffic on City streets is restricted to specific routes that are designated for through traffic of trucks over three tons. These truck routes help to facilitate the movement of goods throughout the city, while providing a connection between major freeway facilities to local roadways. Trucks are allowed on designated routes even if they do not have an origin or destination within the City of Rancho Cucamonga. Figure 5.17-7, *Truck Routes*, shows the truck route system in the city. Truck traffic on the freeway made up approximately 10 percent of total daily travel on I-10, up to 8 percent on I-15, and up to 5 percent on SR-210 in 2017. There are approximately 8,000-25,000 trucks passing through the City of Rancho Cucamonga each day on local freeways. Based on available Caltrans Truck Annual Average Daily Traffic (AADT) data throughout the SCAG region, Rancho Cucamonga freeways contain similar levels of truck traffic.

Freight Rail Lines

Local freight service operates through trackage rights on the Metrolink San Gabriel subdivision through Rancho Cucamonga—the same line that carries Metrolink trains on the San Bernardino line. This is not a main freight line. Both the Union Pacific and Burlington Northern Santa Fe Railway (BNSF Railway) main lines are located farther south. The line does not serve through-freight traffic except for occasional diversions when the main freight lines to the south are closed or restricted for limited periods. Freight traffic levels are very light, with only infrequent service to local industrial uses.

The line serves local freight traffic and switchers to various spur lines to industrial areas and lineside industries in south Rancho Cucamonga, including:

- A spur between Archibald Avenue and Hermosa Avenue, with sidings to the south just east of Haven Avenue,
- Spur tracks north of the tracks just west Milliken Avenue,
- Spurs to both the north and the south between Milliken Avenue and Rochester Avenue, and
- Spur tracks to the north between I-15 and Etiwanda Avenue.

Citywide, railroad lines cross most streets at grade, including on Vineyard, Hellman, Archibald, Hermosa, Rochester, and Etiwanda Avenues. The grade separated crossings at Milliken Avenue and Haven Avenue have been constructed along these key travel corridors. A grade separation at Etiwanda Avenue and BNSF Railway line is currently under design to better accommodate truck traffic.

Traffic Collisions

A traffic collision is any event where a moving vehicle strikes any object. From 2014 to 2018, there were a total of 1,233 collisions in Rancho Cucamonga with a total of 21 fatalities and 34 people severely injured. The fatality rate in the city was 1.63 percent compared to the countywide fatality rate of 2.6 percent. The top three cited factors contributing to collisions in the City were right-of-wat violations, unsafe speed, and traffic signals and signs. The top three cited factors in the County were unsafe speed, improper turning, and right-of-way violations.

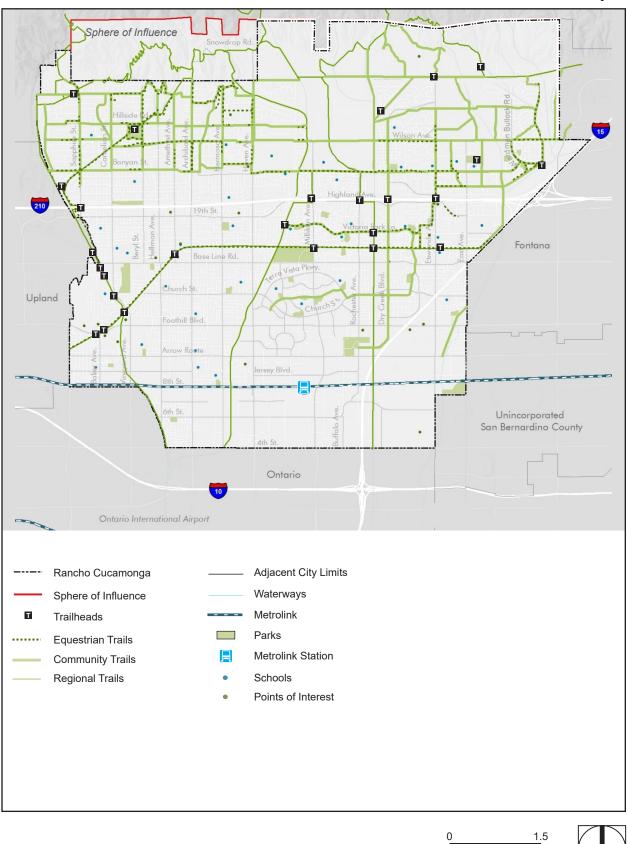
The number of vehicle collisions of any type during the five-year period between 2014 and 2018 ranged from 150 to 215 per year. During the same time period, the rate of collisions involving a pedestrian was 6.8 percent and bicyclist was 6.4 percent, compared to countywide rate of 5.3 percent and 3.3 percent, respectively.

Collision Density (2014-2018)

During the five-year period between 2014 and 2018, the vehicle collision density was spread out in the city with most major intersections seeing high number of collisions, as shown in Figure 5.17-8, *Vehicle Collisions*. The intersections that showed higher number of vehicle collisions density were Foothill Boulevard and Hermosa Avenue, Foothill Boulevard and Rochester Avenue, Foothill Boulevard and Day Creek Boulevard, and Base Line Road and Milliken Avenue. Bicycle collisions occurred at specific areas, with high number occurring at the southwest part of the city, as shown in Figure 5.17-9, *Bicycle Collisions*. The intersections that showed higher number of bicycle collisions density were Base Line Road and Vineyard Avenue, Base Line Road and Rochester Avenue, and Foothill Boulevard and Hellman Avenue. As shown in Figure 5.17-10, *Pedestrian Collisions*, the higher density of pedestrian collisions occurred mostly on Foothill Boulevard to the southwest part of the city as well. Several fatal collisions involving a pedestrian occurred at the edge of the city on 4th Street.

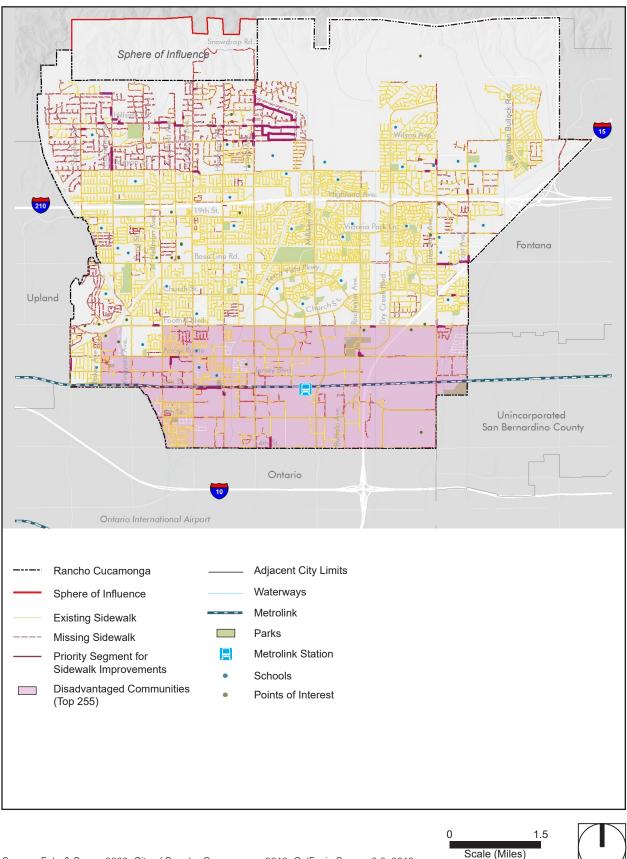
While vehicle collisions were occurring throughout the city, the collisions involving a pedestrian and bicycle were more concentrated to the southwest part of the City. The number of fatal collisions involving a pedestrian and bicycle were comparatively higher than collisions involving a vehicle.

Figure 5.17-5 - Trails 5. Environmental Analysis



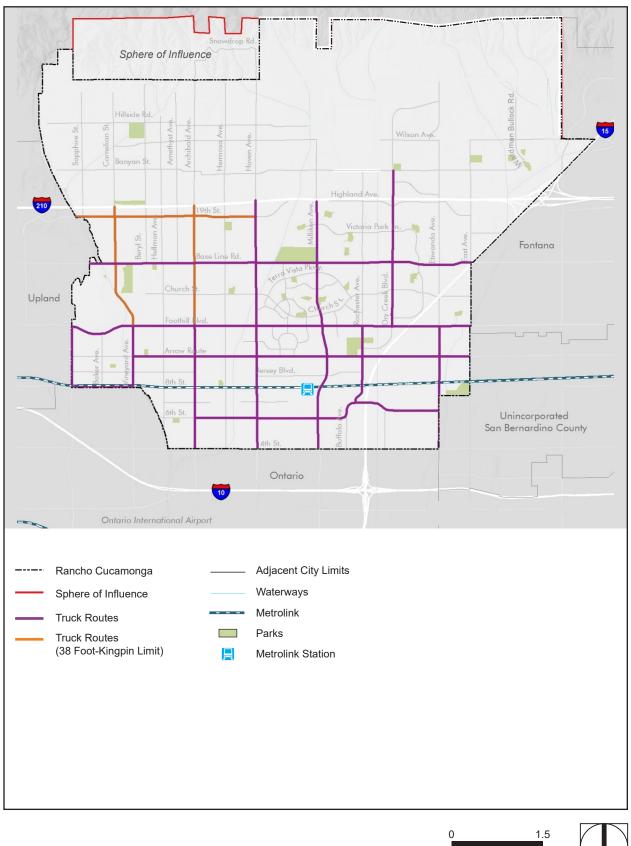
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Figure 5.17-6 - Pedestrian Facilities 5. Environmental Analysis



Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2019; CalEnviroScreen 3.0, 2018

Figure 5.17-7 - Truck Routes 5. Environmental Analysis

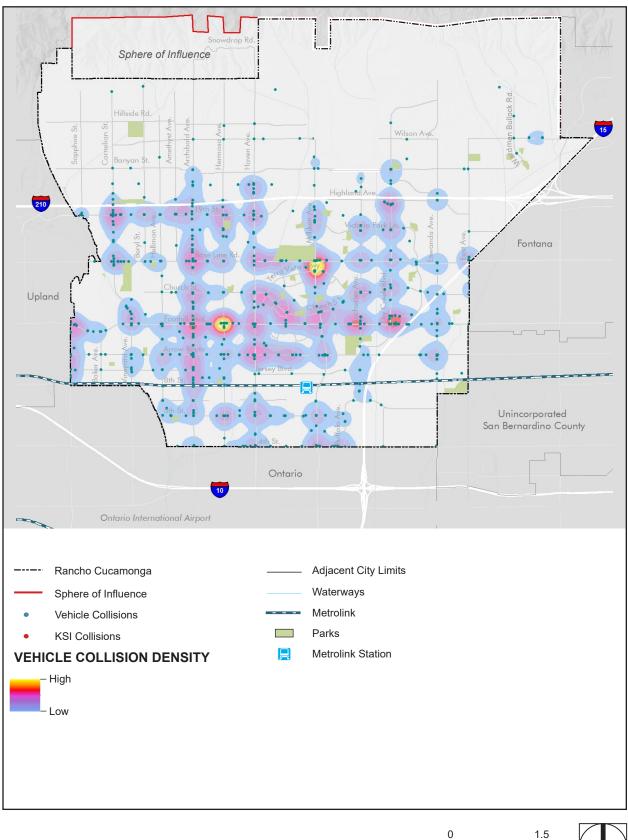


Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2019

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Figure 5.17-8 - Vehicle Collisions 5. Environmental Analysis

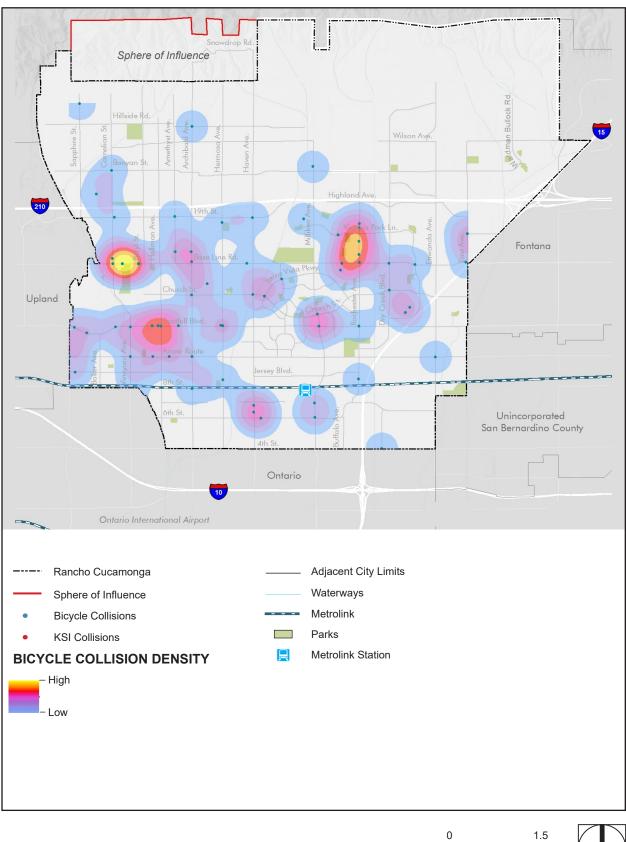


Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2019; TIMS, 2014-2018

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Figure 5.17-9 - Bicycle Collisions 5. Environmental Analysis

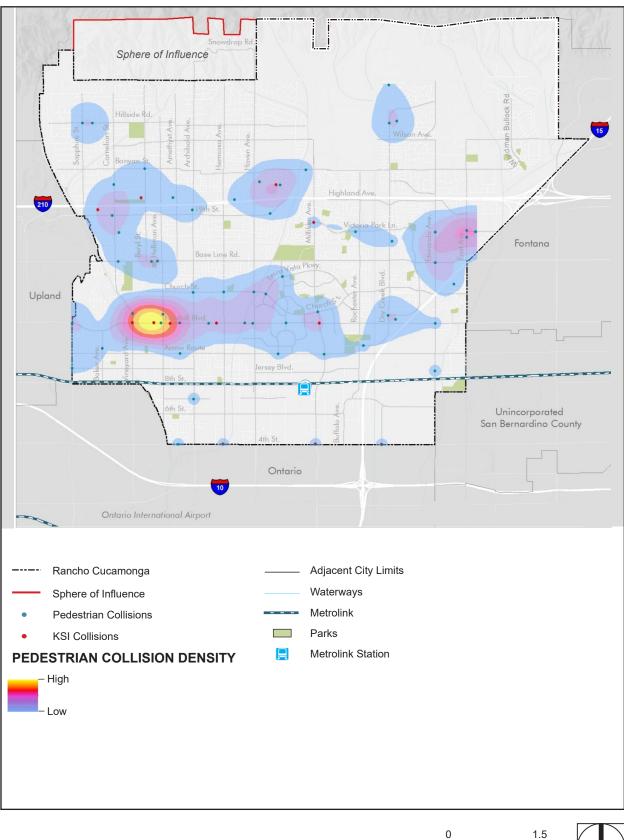


Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2019; TIMS, 2014-2018

Scale (Miles)

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Figure 5.17-10 - Pedestrian Collisions 5. Environmental Analysis



Source: Fehr & Peers, 2020; City of Rancho Cucamonga, 2019; TIMS, 2014-2018

Scale (Miles)

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5.17.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all of the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) regarding policies to reduce vehicle miles travelled (VMT).
- T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-4 Result in inadequate emergency access.

City Council Resolution 2020-056 adopted City Traffic Study Guidelines and adopted the threshold of significance related to VMT thresholds from T-2 above. The threshold adopted through that resolution, which uses vehicle miles traveled per service population (VMT/SP), is presented below:

Methods	Project Threshold	Cumulative Threshold							
Land Use Plans (such as Gen	General Plans and Specific Plans)								
 San Bernardino Traffic Analysis Model (SBTAM) forecast of total daily VMT/SP. To capture project effect, the same cumulative year population and employment growth totals should be used. The 'project' only influences land use allocation. 	A significant impact would occur if the project VMT/SP (for the land use plan) exceeds the Citywide average. And after the General Plan is next updated and adopted, this threshold shall be replaced with the following: A significant impact would occur if the project VMT/SP (for the land use plan) exceeds the Citywide average under General Plan Buildout Conditions.	A significant impact would occur if the project caused total daily VMT within the City to be higher than the no project alternative under cumulative conditions.							
 Consistency check with SCAG RTP/SCS. Is the proposed project within the growth projections in the RP/SCS? 	NA	A significant impact would occur if the project is determined to be inconsistent with the RTP/SCS.							

VMT Impact Thresholds

5.17.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant policies of the Rancho Cucamonga General Plan Update, which may contribute to reducing potential transportation impacts as a result of implementation of the proposed project.

Open Space Element

- **GOAL OS-1 OPEN SPACE.** A complete, connected network of diverse parks, trails, and rural and natural open space that support a wide variety of recreational, educational and outdoor activities.
- **OS-1.1 Equitable Access to Parks.** Strive to ensure that at least one park or other public open space is within 1/2 mile or a 10-minute walk from homes and jobs, without crossing major streets except at signalized crossings.
- **OS-1.2 Underserved Communities.** Prioritize the provision of new trails, parks, plazas, and other open space types in areas of the City that are underserved by parks, services, and amenities.
- **GOAL OS-2 TRAILS.** A complete, connected network of diverse trails and connected open space that improves access to all access of the city and encourages non-motorized activities.
- **OS-2.1 Trail Corridors.** Extend, improve and complete the multi-purpose trail network, wherever possible, by utilizing existing flood control channel and utility corridor rights-of-way as public trail corridors.
- **OS-2.2 Connectivity.** Connect trails in Rancho Cucamonga to trails in the San Bernardino National Forest and other hillside open space areas.
- **OS-2.3 Trailheads.** Provide trailhead amenities such as parking, restrooms, information boards, and maps.
- **OS-2.4 Equestrian Trails.** Continue to maintain and pursue the development of planned trails and facilities for equestrian use.
- **OS-2.5 Utility Corridors.** Preserve the primary function of utility corridors while providing every reasonable opportunity for shared public use for active mobility and recreational purposes.
- **OS-2.6 Design for Heat**. Consider extreme heat in the design of streets, parks, trails, and playgrounds to support activity throughout the year and in all weather conditions by including shade trees, shade structures, water fountains, splash pads, lighting for night play in most spaces.
- **OS-2.7 Access.** Require new development to provide access to existing or future trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities).

OS-2.9 Trail and Park Sponsorship. Support the creation of partnerships with organizations to sponsor and maintain green spaces, parks, trails, and community gardens.

Mobility and Access Element

- **Goal MA-1 REGIONAL MOBILITY HUB.** A multimodal transportation hub that connects regional and local destinations.
- **MA-1.1 Transportation Leadership.** Take a leadership role in local and regional transportation related planning and decision making.
- MA-1.2 Rancho Cucamonga Station Redevelopment. Support redevelopment in and around the Rancho Cucamonga Station to support transit-oriented development.
- **MA-1.3 Funding.** Support federal, statewide, and regional infrastructure funding for transit and transportation.
- MA-1.4Local Mobility Hub. Require new development at mobility hubs and key
stops along the future bus rapid transit and future transit circulator system
to facilitate first mile/last mile connectivity to neighborhoods.
- MA-1.5Provide Mobility Options. Provide roadway connections and local mobility
hubs designed to capture 80% of the population and employment south of
Base Line Road.
- MA-1.6 Boulevard Implementation. Require boulevards with high-quality transit to not only account for how transit service is impacted by the geometry of the corridor, but also by signal timing, signal phasing, turns, and other operations that may jeopardize the quality of service.
- **Goal MA-2 ACCESS FOR ALL.** A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all users.
- MA-2.1 Complete Streets. Require that new roadways include provisions for complete streets, balancing the needs of all users of all ages and capabilities.
- MA-2.2 Street Design. Implement innovative street and intersection designs to maximize efficiency and safety in the city.
- MA-2.3 Street Connectivity. Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.
- MA-2.4 Street Vacations. Prioritize pedestrian and utility connectivity over street vacations.
- MA-2.5 Context. Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.

Roadway Scale. Balance roadway size and design configuration to ensure
that vehicular speeds, volumes and turning movements do not compromise
the safety and comfort of pedestrians and bicyclists.

- MA-2.7 Facility Service Levels. Maintain level of service (LOS) D for priority modes on each street; LOS E or F may be acceptable at intersections or segments for modes that are not prioritized. The City will develop a list of intersections and roadways that are protected from this level of service policy.
- MA-2.8 New Streets. Require new roadway connections to improve emergency accessibility and roadway connectivity north of State Route 210 and within the Southeast Area.
- MA-2.9 Block Pattern. Require development projects to arrange streets in an interconnected block pattern, so that pedestrians, bicyclists, and drivers are not forced onto arterial streets for inter- or intra- neighborhood travel.
- MA-2.10 Master Planning. Master plan sites so as to ensure a well-structured network and block pattern with sufficient access and connectivity.
- MA-2.11 Transportation Demand Management. Require new projects to implement Transportation Demand Management strategies, such as employer provided transit pass/parking credit, low-speed communications infrastructure for telecommuting, carpooling incentive, etc.
- **Goal MA-3 SAFETY.** A transportation network that adapts to changing mobility needs while preserving sustainable community values.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.
- **MA-3.2 Traffic Safety.** Prioritize transportation system improvements that help eliminate traffic-related fatalities and severe injury collisions.
- MA-3.3 Vulnerable User Safety. Prioritize pedestrian improvements in the Pedestrian Priority Area shown on Figure 8 to promote safety in the southwest area of the City.
- **MA-3.4 Emergency Access.** Prioritize development and infrastructure investments that work to implement, maintain, and enhance emergency access throughout the community.
- **Goal MA-4 GOODS MOVEMENT.** An efficient goods movement system that ensures timely deliveries without compromising quality of life, safety and smooth traffic flow for residents and businesses.

- **MA-4.1 Truck Network.** Avoid designating truck routes that use collector or local streets that primarily serve residential uses and other sensitive receptors.
- MA-4.2 Southeast Area Connectivity. Require new development in the Southeast Area to provide the necessary infrastructure to maintain access and public safety as shown on Figure 11.
- MA-4.3 Future Logistics Technology. Support and plan for electrification and autonomy of the truck fleet.
- MA-4.4 Rail Access. Avoid abandonment of rail access to industrial parcels or utilize such right of way to balance and enhance other connectivity goals within the City (such as pedestrian/bicycle trails).
- **MA-4.5 Grade Separation.** Support the construction of grade separations of roadways and trails from rail lines.
- **Goal MA-5 SUSTAINABLE TRANSPORTATION.** A transportation network that adapts to changing mobility needs.
- MA-5.1 Land Use Supporting Reduced VMT. Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.
- MA-5.17Emerging Technologies. Prioritize investments in critical infrastructure and
pilot programs to leverage proven new transportation technology.
- **MA-5.3 Funding.** Remain flexible in the pursuit and adoption of transportation funding mechanisms that fund innovative transportation solutions.
- MA-5.4 Intelligent Systems Preparation. Upgrade the City's ATMS and communications systems to ensure that the City meets the intelligent transportation system demands of today while planning for future demands associated with AVs and CVs.

5.17.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.17-1: The proposed project potentially creates an inconsistency with the adopted RTP/SCS which notes a future interchange at Arrow Route and I-15. [T-1]

The proposed project provides extensive consistency related to regional active transportation plans, transit plans, and other mobility infrastructure. However, the RTP/SCS (RTP ID Number 200152) identifies a new interchange at the intersection of Arrow Route and I-15. The proposed General Plan would eliminate that connection, creating a potential inconsistency with the RTP/SCS.

To determine the impact of this facility removal, VMT forecasting with and without this future interchange was completed, to determine if its elimination would increase or decrease VMT. The VMT forecasting results, using the Boundary Method, indicate that VMT in the City of Rancho Cucamonga would decrease by 8,729 VMT per weekday within the City limits. This indicates that removing the Arrow Route interchange with I-15 would result in a benefit to VMT within the City, making the impact **less-than-significant** and no further mitigation would be required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.17-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.17-1 would be less than significant.

Impact 5.17-2: The project may be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. [T-2]

A Full Accounting Method VMT assessment with the general plan under a variety of scenarios was prepared for the proposed project. Table 5.17-5 summarizes the results of that VMT assessment. Please note that the assessment did not include a reduction in anticipated VMT associated with the proposed connection of high-speed rail to the Rancho Cucamonga Transit Station, as complete funding for that facility extension to Rancho Cucamonga has yet to be identified. This assumption presents a conservative estimate of VMT forecasting for the proposed project.

Location	Population	Employment	VMT	VMT/Service Population	Percent Change		
Existing (2018) Conditions							
City of Rancho Cucamonga	176,274	89,717	9,875,814	37.1	-		
San Bernardino County	2,140,813	791,973	113,072,928	38.6	-		
Model Wide (e.g. SCAG region)	18,390,430	7,557,562	851,111,279	32.8	-		
Buildout (assumed 2040)							
City of Rancho Cucamonga	233,887	110,948	10,730,168	31.1	-16.2		
San Bernardino County	2,758,856	1,035,840	133,085,749	35.1	-9.07		
Model Wide (e.g. SCAG region)	22,159,069 ¹	9,851,898	971,417,250	30.3	-7.62		

Table 5.17-5 City Full VMT Estimates

1 Total population numbers from the SCAG model are based upon traffic area zones (TAZs), the boundaries of which do not correspond to the City boundaries. Consequently, the population numbers here do not match those disclosed in the Population, Employment, and Housing section of the Draft EIR, which consider the population within the City boundaries.

Source: Fehr & Peers, 2021

The results of the VMT assessment indicates that, with implementation of the land use and circulation element in the proposed General Plan, VMT/SP would be reduced by approximately 16 percent (i.e., improves) compared to the existing condition. Furthermore, the proposed General Plan shows benefits to the region by also reducing Countywide and Region Wide VMT accordingly.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.17-2 would be potentially significant.

Mitigation Measures

Overall, the analysis shows that the SBTAM model predicts VMT/SP to decrease in the future due to improved development and transportation patterns. Although SBTAM is the best available tool to estimate VMT for the City of Rancho Cucamonga (and the City has identified it as the most appropriate tool to estimate VMT as part of their VMT guidelines update), there are some factors that affect how much people travel that are not completely captured by the model. Specifically, some factors, like the cost of fuel, have been shown to have a dramatic effect on people's choices on how much they drive. The City of Rancho Cucamonga does not have control of the cost of fuel; however, it is something the State could have control over as the legislature could impose regulations that would manage the cost of fuel to influence driver behavior to attain state goals. To date, the state has discussed measures that would influence VMT significantly, including a VMT tax or modifications to the fuel tax.

Although the findings from the modeling indicate that the project is beneficial from a VMT efficiency perspective using the best tool available in San Bernardino County (and the proposed General Plan is expected to produce VMT at a rate that would not result in a significant impact), the uncertainty related to future fuel prices, driving habits of residents, and future legislative policy could dramatically influence VMT production in the City during the horizon of this General Plan. In addition, the intent of the proposed project is to improve connectivity by expanding pathways, road extensions, and removing existing barriers to access. However, implementing polices like MA-2.1 that calls for complete streets and MA-2.3 that emphasizes connectivity, will take time to implement. It is probable that some development projects may be proposed and considered before the citywide improvements envisioned by the General Plan can be completed. As the modeling assumes a fully implemented General Plan that will reduce VMT as shown in Table 5.17-5, projects that occur before buildout may increase VMT until the cumulative condition is reached.

Although CEQA does not require the assessment to investigate speculative and unforeseeable circumstances, for the purposes of a Citywide planning effort, the City is choosing to disclose a significant VMT impact due to speculative influences to provide complete transparency. Given this information, the VMT impact is considered **significant**. As a programmatic project for a future scenario that encompasses many different individual projects, potential mitigations to address this significant VMT impact would need to be applied to the citywide level. The following policies would further reduce VMT within the City:

- **OS-2.5 Utility Corridors.** Preserve the primary function of utility corridors while providing every reasonable opportunity for shared public use for active mobility and recreational purposes.
- **MA-1.2 Rancho Cucamonga Station Redevelopment.** Support redevelopment in and around the Rancho Cucamonga Station to support transit-oriented development.
- **MA-1.3 Funding.** Support federal, statewide, and regional infrastructure funding for transit and transportation.
- **MA-1.4 Local Mobility Hub.** Require new development at mobility hubs and key stops along the future bus rapid transit and future transit circulator system to facilitate first mile/last mile connectivity to neighborhoods.
- MA-1.5 Provide Mobility Options. Provide roadway connections and local mobility hubs designed to capture 80% of the population and employment south of Base Line Road.
- **MA-1.6 Boulevard Implementation.** Require boulevards with high-quality transit to not only account for how transit service is impacted by the geometry of the corridor, but also by signal timing, signal phasing, turns, and other operations that may jeopardize the quality of service.
- **MA-2.1 Complete Streets.** Require that new roadways include provisions for complete streets, balancing the needs of all users of all ages and capabilities.
- **MA-2.2 Street Design.** Implement innovative street and intersection designs to maximize efficiency and safety in the city.
- **MA-2.3 Street Connectivity.** Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.
- MA-2.4 Street Vacations. Prioritize pedestrian and utility connectivity over street vacations.
- **MA-2.5 Context.** Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.
- **MA-2-6 Roadway Scale.** Balance roadway size and design configuration to ensure that vehicular speeds, volumes and turning movements do not compromise the safety and comfort of pedestrians and bicyclists.
- **MA-2.8** New Streets. Require new roadway connections to improve emergency accessibility and roadway connectivity north of State Route 210 and within the Southeast Area.

- MA-2.9 Block Pattern. Require development projects to arrange streets in an interconnected block pattern, so that pedestrians, bicyclists, and drivers are not forced onto arterial streets for inter- or intra- neighborhood travel.
- **MA-2.10 Master Planning.** Master plan sites so as to ensure a well-structured network and block pattern with sufficient access and connectivity.
- MA-2.11 Transportation Demand Management. Require new projects to implement Transportation Demand Management strategies, such as employer provided transit pass/parking credit, low-speed communications infrastructure for telecommuting, carpooling incentive, etc.
- MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.
- **MA-3.2 Traffic Safety.** Prioritize transportation system improvements that help eliminate traffic-related fatalities and severe injury collisions.
- **MA-3.3** Vulnerable User Safety. Prioritize pedestrian improvements in the Pedestrian Priority Area shown on Figure 8 to promote safety in the southwest area of the City.
- **MA-4.4 Rail Access.** Avoid abandonment of rail access to industrial parcels or utilize such right of way to balance and enhance other connectivity goals within the City (such as pedestrian/bicycle trails).
- MA-5.1 Land Use Supporting Reduced VMT. Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.

While these policies and standard conditions of approval could help reduce VMT in the City, the applicability of them as project-level mitigation would be dependent on the significance and context of the project and the size of the impact. Mitigation measures must be proportional to the impact, and many of the methods for reducing trips require a citywide system as envisioned in the proposed General Plan. Additional analysis would need to be conducted to determine how and where the mitigation measures would need to be implemented to mitigate the impact of the project. As the VMT impact would be citywide, the mitigation measures would be focused on changing or improving the citywide travel patterns, transportation network, or infrastructure. The cost of implementing these measures is unknown and could vary substantially. If some or all these measures are included in a capital improvement program, the payment of the fees occurs incrementally meaning that development happens first to the pay the fees, and then the improvements can be constructed once sufficient revenue is collected. Given the uncertainty of the effectiveness of implementing these mitigation measures at a citywide level in the short term, implementation of the proposed project, the impact would be significant and unavoidable in the short-term,

and less than significant at buildout. Nonetheless, the VMT impact is considered **significant and unavoidable**.

Level of Significance After Mitigation: Impact 5.17-2 would be significant and unavoidable.

Impact 5.17-3: The project would not substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [T-3]

The City of Rancho Cucamonga has adopted engineering standards to ensure consistency in the geometric design of their mobility facilities. Additionally, all plans undergo an extensive review process at the City to ensure consistency with these adopted standards. Given that all future projects will be subject to these reviews, this impact is considered less than significant, and no mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.17-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.17-3 would be less than significant.

Impact 5.17-4: The project would not result in inadequate emergency access. [T-4]

The City of Rancho Cucamonga has adopted standards related to emergency accessibility. Additionally, the fire department reviews all development applications to ensure that adequate emergency accessibility is provided based on local and state guidance. Since all future projects will undergo such reviews and requirements, this impact is considered less than significant, and no mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.17-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.17-4 would be less than significant.

5.17.5 CUMULATIVE IMPACTS

Table 5.17-6 summarizes the project's cumulative effect on VMT, which evaluates how the project will change travel behavior in the region. Unlike the Full Accounting Method, the project effect on VMT utilizes all the VMT within a specific geographic boundary (including trips that simply pass through the boundary). This assessment accounts for other rerouting of trips that may occur due to the project shifting travel patterns due to congestion or other factors and provides an additional, sometimes more complete, picture of the VMT impacts associated with the project. Please note, since the project increases service population in the City and/or San Bernardino County, VMT will also increase in the region. As such, we also normalize boundary VMT for this assessment to provide an appropriate comparison between scenarios. For this assessment, only the future year results are utilized such that the project can be compared back to the assumptions from the RTP/SCS.

Location	Population	Employment	VMT	VMT/Service Population					
2040 No Project Conditions (e.g. RTP/SCS)									
City of Rancho Cucamonga	196,806	102,980	5,286,090	17.6					
San Bernardino County	2,721,775	1,027,872	84,330,252	22.5					
Model Wide (e.g. SCAG region)	22,121,988	9,843,930	496,572,126	15.5					
2040 With proposed General Plan Conditions									
City of Rancho Cucamonga	233,887	110,948	5,559,483	16.1					
San Bernardino County	2,758,856	1,035,840	85,037,896	22.4					
Model Wide (e.g. SCAG region)	22,159,069	9,851,898	497,542,500	15.5					

Table 5.17-6 City Boundary Method VMT Estimates

As shown in Table 5.17-6, the proposed project is anticipated to improve VMT/SP using the boundary method. This indicates that the project will improve overall travel efficiency in the area and the impact is considered **less than significant**.

5.17.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.17-1, 5.17-2, 5.17-3, and 5.17-4.

Without mitigation, these impacts would be **potentially significant**:

• Impact 5.17-2 Short term inconsistency with the reduction in VMT.

5.17.7 MITIGATION MEASURES

Impact 5.17-2

MITIGATION MEASURES

There is no mitigation that can accelerate the construction of the land plan and mobility improvements envisioned by the proposed General Plan. The cumulative condition demonstrates that at buildout the proposed project will be consistent with the reduction of VMT in both the City and regional context.

5.17.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

After implementation of the proposed project, the impacts remain significant and unavoidable in the short-term, and less than cumulatively considerable at buildout.

5.17.9 REFERENCES

Rancho Cucamonga, City of. 2020, May. General Plan Update – PLAN RC Community Mobility Existing Conditions Report. Appendix 2-1. This page intentionally left blank.

5.18 TRIBAL CULTURAL RESOURCES

Tribal cultural resources (TCR) include landscapes, sacred places, or objects with a cultural value to a California Native American tribe. This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the proposed General Plan Update EIR to impact TCRs in the City of Rancho Cucamonga. Other potential impacts to cultural resources (i.e., prehistoric [pre-contact], historic, and disturbance of human remains) are evaluated in Section 5, *Cultural Resources*.

Chapter Overview

Conducting consultation early in the CEQA process allows tribal governments, public lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process.

TCRs may be found throughout the City of Rancho Cucamonga, but information about them is much more difficult to obtain than for most archaeological resources. Currently, there is no database of such resources, and most cannot be identified by surveying the land. Identification of TCRs requires coordination with Native American tribes, and their precise location is often difficult to determine because they may only be documented through the oral history of the tribe.

In accordance with AB 52, the City notified six local tribes about the proposed project on June 1, 2021, to determine the potential for tribal cultural resources onsite and to determine if local knowledge of TCRs is available about the project site and surrounding area. The San Manuel Band of Mission Indians responded on June 8, 2021, requesting information on the General Plan Update. Information on the General Plan Update was provided to the San Manuel Band of Mission Indians on June 21, 2021. The Gabrieleño Band of Mission Indians – Kizh Nation responded on June 2, 2021, and declined consultation.

The City requested a local government tribal consultation list from the California Native American Heritage Commission (NAHC) on June 1, 2021. The tribal consultation list was requested in accordance with SB 18 requirements for a general plan. The NAHC responded on June 15, 2021, and provided a list of tribes for the City to contact regarding potential consultation. The City sent initial notification letters to 16 California Native American tribes and tribal contacts on June 21, 2021. No responses have been received by the City from the tribes on the tribal consultation list provided by the NAHC.

Heart of the Matter

Rancho Cucamonga is a city rich with historic and cultural resources. While historic and cultural resources consider the built environment since settling of the area, tribal cultural resources are those of first residents of the area. Tribal cultural resources include sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. These resources are recognized as non-renewable resources that require management to assure their benefit to present and future Californians; and are generally

important to a culture, a subculture, or a community for scientific, traditional, or religious reasons.

5.18.1 ETHNOGRAPHIC SETTING

Gabrielino

Ethnographic accounts of Native Americans indicate that the Gabrielino (also known as Tongva) once occupied the region that encompasses the project area. At the time of contact with Europeans, the Gabrielino were the main occupants of the southern Channel Islands, the Los Angeles basin, much of Orange County, and extended as far east as the western San Bernardino Valley. The term "Gabrielino" came from the group's association with Mission San Gabriel Arcángel, established in 1771. The Gabrielino are believed to have been one of the most populous and wealthy Native American tribes in southern California prior to European contact (Bean and Smith 1978; McCawley 1996; Moratto 1984). The Gabrielino spoke a Takic language. The Takic group of languages is part of the Uto-Aztecan language family.

The Gabrielino occupied villages located along rivers and at the mouths of canyons. Populations ranged from 50 to 200 inhabitants. Residential structures within the villages were domed, circular, and made from thatched tule or other available wood. Gabrielino society was organized by kinship groups, with each group composed of several related families who together owned hunting and gathering territories. Settlement patterns varied according to the availability of floral and faunal resources (Bean and Smith 1978; McCawley 1996; Miller 1991).

Vegetal staples consisted of acorns, chia seeds, piñon nuts, sage, cacti, roots, and bulbs. Animals that were hunted included deer, antelope, coyote, rabbits, squirrels, rodents, birds, and snakes. The Gabrielino also fished and collected marine shellfish (Bean and Smith 1978; McCawley 1996; Miller 1991). By the late 18th century, the Gabrielino population had significantly dwindled due to introduced European diseases and dietary deficiencies. Gabrielino communities disintegrated as families were taken to the missions (Bean and Smith 1978; McCawley 1996; Miller 1991). However, current descendants of the Gabrielino are preserving Gabrielino culture.

Serrano

The project area is also located adjacent to territory known to have been occupied by the Serrano group of Native Americans at the time of contact with Europeans, around 1769 C.E. The Serrano occupied an area in and around the San Bernardino Mountains and northward into the Mojave Desert. Their territory also extended west along the north slope of the San Gabriel Mountains, east as far as Twentynine Palms, north into the Victorville and Lucerne Valley areas, and south to the Yucaipa Valley and San Jacinto Valley (Cultural Systems Research 2005). The Serrano speakers in the Mojave Desert who lived along the Mojave River were known as Vanyume. Serrano is a language within the Takic family of the Uto-Aztecan language stock.

The Serrano were mainly hunters and gatherers who occasionally fished. Game hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, pinyon nuts, bulbs and tubers, shoots and roots, juniper berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978).

A variety of materials were used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978).

Settlement locations were determined by water availability, and most Serrano lived in villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

Serrano social and political units were clans, patrilineal exogamous territorial groups. Each clan was led by a chief who had both political and ceremonial roles. The chief lived in a principal village within the clan's territory. The clans were part of a moiety system such that each clan was either a wildcat or coyote clan and marriages could only occur between members of opposite moieties (Earle 2004). On the north side of the San Bernardino Mountains, clan villages were located along the desert-mountain interface on Deep Creek, on the upper Mojave River, in Summit Valley, and in Cajon Pass. The principal plant food available near these villages was juniper berries. These villages also had access to mountain resources, such as acorns and pinyon nuts.

Partly due to their mountainous and desert inland territory, contact between Serrano and Euro-Americans was minimal prior to the early 1800s. In 1819, an *asistencia* (mission outpost) was established near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel reservations (Bean and Smith 1978).

5.18.2 ENVIRONMENTAL SETTING

5.18.2.1 Regulatory Background

Federal

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (United States Code, Title 16, Sections 470aa–mm) became law on October 31, 1979, and has been amended four times. It regulates the protection of archaeological resources and sites that are on federal and Native American lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (United States Code, Title 25, Sections 3001 et seq.) recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

State

California Public Resources Code

Archaeological resources are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code (PRC). In addition, cultural resources are recognized as a nonrenewable resource and therefore, receive protection under the California PRC and CEQA.

California Public Resources Code 5097.9–5097.991 provides protection to Native American historical and cultural resources, and sacred sites, and identifies the powers and duties of the NAHC. It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

Section 15064.5(d) and (e) of the CEQA Guidelines specifies procedures to be used in the event of discovery of Native American human remains on non-federal land. Section 15064.5(d) of the CEQA Guidelines addresses procedures when an initial study identifies the existence or probable likelihood of Native American human remains within a project area. Section 15064.5(e) provides guidance for accidental discovery of any human remains after a project is already under way. These provisions protect such remains from disturbance, vandalism, and inadvertent destruction; establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to identify the Most Likely Descendant (MLD) and mediate any disputes regarding disposition of such remains.

California Health and Safety Code

California Health and Safety Code Section 7050.5 requires that if human remains are discovered in the project area, disturbance of the site shall halt and remain halted until the coroner has investigated the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of Native American, he or she shall contact, by telephone within 24 hours, the NAHC.

California Register of Historical Resources

The California Register of Historic Resources is the state version of the National Register of Historic Places program. It was enacted in 1992 and became official January 1, 1993. The California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources. Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. According to subsection (c) of the PRC Section 5024.1, a resource may be listed as a historical resource in the California Register if it meets any of the four National Register criteria.

California Senate Bill 18

Existing law provides limited protection for Native American precontact, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious sites, ceremonial sites, shrines, burial grounds, pre-contact ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

SB 18 (California Government Code Sections 65352.3 et seg.) was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near "traditional tribal cultural places" (TTCP). Per SB 18, the law requires local jurisdictions to provide opportunities for involvement of California Native American tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after receiving a request to inform the lead agency if the proposed project is determined to be in proximity to a TTCP, and another 90 days for tribes to respond to a local government if they want to consult to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, they would be included in the project's EIR. If both the City of Rancho Cucamonga and the tribe agree the adequate mitigation or preservation measures cannot be taken, neither party is obligated to take action.

SB 18 is triggered before the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption of amendment of specific plans, the Final Tribal Guidelines advises that SB 18 requirements extend to specific plans as well, because state planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code Section 65453). In addition, SB 18 provides a new definition of TTCP requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies, or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, practices, lifeways, and ceremonial activities). SB 18 law also amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

Assembly Bill 52

AB 52 (PRC 210803.1) took effect July 1, 2015, and requires inclusion of a new section in CEQA documents titled Tribal Cultural Resources, which heritage sites. Under AB 52, a tribal cultural resource is defined similar to tribal cultural places under SB 18—sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or eligible for inclusion in the California Register of Historic Resources

or included in a local register of historical resources; or the lead agency, supported by substantial evidence, chooses at its discretion to treat the resources as a tribal cultural resource.

Similar to SB 18, AB 52 requires consultation with tribes at an early stage to determine whether the project would have an adverse impact on the TCR and define mitigation to protect them. Per AB 52, within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it. The tribe then has 30 days of receiving the notification to respond if it wishes to engage in consultation. The lead agency must initiate consultation within 30 days of receiving the request from the tribe. Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a tribal cultural resource, or a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached. Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on tribal cultural resources and discuss feasible alternatives or mitigation that avoid or lessen the impact.

Standard Conditions of Approval

The City consults with tribes as part of the development review process. The following standard conditions of approval will be discussed with the tribes during consultation and may be applied to projects for which formal consultation is not required.

- 5.18-1: Inadvertent Archeological Find. If during ground disturbance activities, cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Cultural resources are defined as being multiple artifacts in close association with each other, but also include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).
 - a. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Planning Director to discuss the significance of the find.
 - b. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
 - c. Grading or further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.
 - d. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural

resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Locations Condition.

- e. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the project archaeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.
- f. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and tribal cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or tribal cultural resources, these issues will be presented to the Planning Director for decision. The City's Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological and tribal cultural resources, recommendations of the project archaeologist, and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision and/or City Planning Director shall be appealable to the City Planning Commission and/or City Council.
- **5.18-2**: **Cultural Resources Disposition.** In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:
 - a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Rancho Cucamonga Planning Department:
 - i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.
 - ii. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recording has been completed, with an exception that sacred items, burial goods, and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request.
 - iii. If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a San Bernardino County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and

use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees by the Applicant necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods, and Native American human remains, as defined by the cultural and religious practices of the Most Likely Descendant. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.

- 5.18-3: Archaeologist Retained. Prior to issuance of a grading permit the project applicant shall retain a qualified Registered Professional Archaeologist (RPA), to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources. The Registered Professional Archaeologist and the Tribal monitor(s) shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The Registered Professional Archaeologist and the Tribal monitor(s), shall independently have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors. The developer/permit holder shall submit a fully executed copy of the contract to the Planning Department to ensure compliance with this condition of approval. Upon verification, the Planning Department shall clear this condition. In addition, the Registered Professional Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB 52 to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:
 - a. Project grading and development scheduling;
 - b. The Project archaeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors, and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting

Tribe(s) shall make themselves available to provide the training on an as-needed basis;

- c. The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.
- 5.18-4: Native American Monitoring. Tribal monitor(s) shall be required on-site during all ground-disturbing activities, including grading, stockpiling of materials, engineered fill, rock crushing, etc. The land divider/permit holder shall retain a qualified tribal monitor(s) from the requesting Tribe. Prior to issuance of a grading permit, the developer shall submit a copy of a signed contract between the Tribe and the land divider/permit holder for the monitoring of the project to the Planning Department and to the Engineering Department. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.
- 5.18-5: Archeology Report Phase III and IV. Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Planning Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).
- 5.18-6: Human Remains. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Bernardino County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the San Bernardino County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.
- 5.18-7: Non-Disclosure of Reburial Locations. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the

specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

5.18.2.2 Existing Conditions

The City of Rancho Cucamonga is located in the western portion of San Bernardino County, just south of the San Bernardino National Forest. The land now occupied by the City of Rancho Cucamonga was home to ancestral Gabrielino and Serrano populations of Native Americans, who continue to live in the area to this day.

On June 1, 2021, the City notified six local tribes as part of the AB 52 consultation process—the Gabrieleño Band of Mission Indians – Kizh Nation, Morongo Band of Mission Indians, San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, and Torres Martinez Desert Cahuilla Indians. Responses were received from the San Manuel Band of Mission Indians and the Gabrieleño Band of Mission Indians – Kizh Nation.

On June 21, 2021, the City reached out to 16 tribes and tribal contacts as part of the SB 18 consultation process--the Agua Caliente Band of Cahuilla Indians, the Gabrieleño Band of Mission Indians - Kizh Nation, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, the Gabrielino /Tongva Nation, the Gabrielino Tongva Indians of California Tribal Council, the Gabrielino-Tongva Tribe, the Morongo Band of Mission Indians, the Quechan Tribe of the Fort Yuma Reservation, the San Manuel Band of Mission Indians, the Santa Rosa Band of Cahuilla Indians, the Serrano Nation of Mission Indians, and the Soboba Band of Luiseno Indians. No responses have been received by the City.

5.18.3 THRESHOLDS OF SIGNIFICANCE

The City considers a project to have a significant effect on the environment if the project would:

- TCR-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.18.4 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant policies of the Rancho Cucamonga General Plan Update, which may contribute to reducing potential tribal cultural resource impacts as a result of implementation of the proposed project.

Resource Conservation Element

- **GOAL RC-4 CULTURAL RESOURCES.** A community rich historic and cultural resources.
- **RC-4.1 Disturbance of Human Remains.** In areas where there is a high chance that human remains may be present, the City will require proposed projects to conduct a survey to establish occurrence of human remains, and measures to prevent impacts to human remains if found.
- **RC-4.2 Discovery of Human Remains.** Require that any human remains discovered during implementation of public and private projects within the city be treated with respect and dignity and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.

5.18.5 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.18-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). [Threshold TCR-1]

Conducting consultation early in the CEQA process allows tribal governments, public lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process.

TCRs may be found throughout the City of Rancho Cucamonga, but information about them is much more difficult to obtain than for most archaeological resources. Currently, there is no database of such resources, and most cannot be identified by surveying the land. Identification of TCRs requires coordination with Native American tribes, and their precise location is often difficult to determine because they may only be documented through the oral history of the tribe.

In accordance with AB 52, the City notified six local tribes about the proposed project on June 1, 2021, to determine the potential for tribal cultural resources onsite and to determine if local knowledge of TCRs is available about the project site and surrounding area. The San Manuel Band of Mission Indians responded on June 8, 2021, requesting information on the General Plan Update. Information on the General Plan Update was provided to San Manuel Band of Mission Indians on June 21, 2021. The Gabrieleño Band of Mission Indians – Kizh Nation

responded on June 2, 2021, and declined consultation. At the time of future development, the City will consult with tribes and the City will discuss the City's standard conditions of approval with the tribes.

The City also requested a local government tribal consultation list from the California Native American Heritage Commission (NAHC) on June 1, 2021. The tribal consultation list was requested in accordance with SB 18 requirements for a general plan. The NAHC responded on June 15, 2021, and provided a list of tribes for the City to contact regarding potential consultation. The City sent initial notification letters to 16 California Native American tribes and tribal contacts on June 21, 2021. No responses have been received by the City from the tribes on the tribal consultation list provided by the NAHC.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.18-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.18-1 would be less than significant.

5.18.6 CUMULATIVE IMPACTS

As with the proposed project and future development in Rancho Cucamonga, each related cumulative project would be required to comply with AB 52 and PRC Section 21083.2(i), which addresses accidental discoveries of archaeological sites and resources, including tribal cultural resources. The standard conditions of approval and the policies from the General Plan Update indicated in this Section would apply to both the proposed project and the project-specific CEQA review for future development in Rancho Cucamonga. Therefore, any discoveries of Tribal Cultural Resources from the project or related projects would be mitigated to a less than significant level; therefore, project impacts would not be cumulatively considerable.

5.18.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, impact 5.18-1 would be less than significant.

5.18.8 MITIGATION MEASURES

No mitigation measures are required.

5.18.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.19 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) discusses the current conditions for utility providers, including water, wastewater, stormwater, and solid waste. Electricity and natural gas are discussed in Section 5-6, *Energy*.

Chapter Overview

This section describes the existing utilities and service systems that serve the proposed project; addresses potential project impacts on the availability and capacity of infrastructure and other facilities; addresses water supply availability; and addresses the potential physical environmental impacts associated with installation of infrastructure.

Heart of the Matter

Rancho Cucamonga requires a sophisticated system of public facilities and infrastructure to keep the city running. Water distribution and wastewater facilities, storm drainage and flood control, integrated waste management facilities, and telecommunications infrastructure are necessary for the daily needs of residential and non-residential uses to help ensure the health, safety, and well-being of the community. The City of Rancho Cucamonga is committed to providing the most affordable options for ensuring a high-quality infrastructure system.

5.19.1 WASTEWATER TREATMENT AND COLLECTION

5.19.1.1 Environmental Setting

Regulatory Background

Federal

Clean Water Act

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, §§ 1251 et seq.). Under the act, the US Environment Protection Agency is authorized to set wastewater standards and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that discharge directly into Waters of the United States. The federal Clean Water Act requires wastewater treatment of all effluent before it is discharged into surface waters.

State

State Water Resources Control Board: Statewide General Waste Discharge Requirements

The General Waste Discharge Requirements specify that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California need to develop a Sewer Master Plan. The plan evaluates existing sewer collection systems and provides a framework for undertaking the construction of new and replacement facilities to

maintain proper levels of service. The master plan includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the existing system with existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

Senate Bill 244

Senate Bill (SB) 244 requires cities and counties to address the infrastructure needs of unincorporated disadvantaged communities in city and county general plans. For cities and counties, SB 244 requires that, before the due date for adoption of the next housing element after January 1, 2012, the general plan land use element must be updated to:

- Identify unincorporated disadvantaged communities.
- Analyze for each identified community the water, wastewater, stormwater drainage, and structural fire protection needs.
- Identify financial funding alternatives for the extension of services to identified communities.

Local

City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code requires that all residences, places of business, or other buildings, or places where people congregate, reside, or are employed be connected to a sanitary sewer or an approved onsite wastewater treatment system subject to the Santa Ana Regional Water Quality Control Board waste discharge requirements (Sections 19.28.050 and 19.28.060). Such a system is subject to a City permit, siting requirements, and operational requirements, such annual inspection and maintaining an operating permit (Sections 19.28.080, 19.28.210, 19.28.220

Standard Conditions of Approval

There are no existing regulations that reduce impacts to wastewater treatment and collection.

5.19.1.2 Existing Conditions

Wastewater Infrastructure and Treatment

Wastewater conveyance (pipes and pump stations) is handled by Cucamonga Valley Water District (CVWD), and wastewater is processed by CVWD and the Inland Empire Utilities Agency (IEUA). CVWD sewer system maintains approximately 37,600 sewer connections and conveys an average of 12.5 million gallons per day (MGD) (CVWD 2017). CVWD services over 40.6 square miles within Rancho Cucamonga and portions of the City of Upland, the City of Ontario, and unincorporated San Bernardino County (CVWD 2017). CVWD oversees the facilities and infrastructure that transport wastewater to treatment plants operated by the IEUA. The CVWD is composed of six independent sewer sheds which connect separately to the IEUA:

- Sewer Shed 1: located west boundary of the city and conveyed to Reclamation Plant No. 1
- Sewer Shed 2: located in the central portion of the city and conveyed to Reclamation Plant No. 1
- Sewer Shed 3: located on the northeast central portion of the city and conveyed to Reclamation Plant No. 4
- Sewer Shed 4: located on the northeast corner of the city boundary and conveyed to Reclamation Plant No. 4
- Sewer Shed 5: located on the central eastern boundary of the city and conveyed to Reclamation Plant No. 4
- Sewer Shed 6: located in the southeast boundary of the city and conveyed to Reclamation Plant No. 1

According to the CVWD 2020 Urban Water Management Plant, at IEUA treatment plants, wastewater is subject to tertiary-level water treatment, an advanced process that produces effluent suitable for re-use. The water produced at IEUA is for either non-potable uses (such as landscaping or industrial uses) or the treated wastewater is disposed of. The IEUA operates the wastewater Regional Plant No. 4 located at the intersection of 6th Street and Etiwanda Avenue in Rancho Cucamonga and Regional Plant No. 1 is located outside of the city boundaries in the city of Ontario near the intersection of Highway 60 and Archibald. Regional Plant NO. 1 has a wastewater treatment capacity of 44 million gallons per day (MGD) while Regional Plant No. 4 has a wastewater treatment capacity of 14 MGD. Currently within the CVWD, the total estimated amount of wastewater collected is approximately 60 gallons of wastewater per person per day or approximately 11.9 MGD for the entire service area (CVWD 2021).

Recycled Water

Wastewater generated within the CVWD's service area is discharged to the IEUA, which provides regional wastewater service to its member agencies, as discussed further above under "Wastewater Infrastructure and Treatment". All four of IEUA's wastewater treatment plants produce water that meets or exceeds State Title 22 recycled water quality standards (CVWD 2021). CVWD and IEUA have been working to increase the supply of recycled water through the Regional Water Recycling Project. Recycled water is former wastewater that has been treated to remove solids and certain impurities and is available for non-potable uses like landscaping and construction. CVWD has been upgrading infrastructure to further distribute recycled water throughout its service area. Recycled water is a new source of water for CVWD and is a sustainable method of efficiently re-using water. Recycled water makes up 2 to 3 percent of CVWD overall water supply and 2,000 AFY is used annually for direct use while 4,000 AFY is used as groundwater recharge (CVWD 2021).

Water Quality

The United States Environmental Protection Agency (EPA) and the State Water Resources Control Board are the agencies responsible for establishing drinking water quality standards. To ensure that drinking water is safe for consumption, the EPA sets Federal regulations, and the State Water Board establishes State regulations that limit the amounts of certain contaminants in water provided by public water systems. CVWD prepares and annual report on water quality that addresses the requirements of both state and federal regulations and mails the annual Water Quality Report to customers (CVWD 2021).

5.19.1.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- U-3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.19.1.4 Plans, Programs, and Policies

- **GOAL PF-5 WATER-RELATED INFRASTRUCTURE**. Water and wastewater infrastructure facilities are available to support future growth needs and existing development.
- **PF-5.1 Water Treatment**. Support the efforts of the CVWD and San Bernardino County agencies to provide and expand water treatment facilities to treat local water sources from canyon surface waters and groundwater.
- **PF-5.2 Wastewater Treatment**. Consult with the Inland Empire Utilities Agency and the Cucamonga Valley Water District (CVWD) to ensure that the treatment facility has sufficient capacity to meet future wastewater treatment needs.
- **PF-5.3 Recycle Water**. Work with the CVWD to expand the recycled water program to include existing private development.

5.19.1.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.19-1: Sewer and wastewater treatment systems are adequate to meet project requirements. [Thresholds U-1 (part) and U-3]

The IEUA operates the wastewater Regional Plant No. 4 within Rancho Cucamonga, which has a treatment capacity of 14 MGD. The current average treatment volume at the facility is 10 MGD. The wastewater Regional Plant No. 4 facility treats water from Rancho Cucamonga, Fontana, and local portions of unincorporated San Bernardino County. The Wastewater Treatment Plants are expected to have adequate capacity to service the Regional Collection System's needs through 2030 and would result in a less than significant impact.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.19-1 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance After Mitigation: Impact 5.19-1 would be less than significant.

5.19.1.6 Cumulative Impacts

Wastewater Treatment Capacity Impacts

The area considered for cumulative impacts to wastewater facilities is the IEUA service area. Cumulative population increases and development within the service area would increase the overall regional demand for wastewater treatment service. The wastewater Regional Plant No. 4 is designed to treat a 10 MGD average flow and 14 MGD peak flow. In addition, wastewater Regional Plant No.1 in Ontario also serves Rancho Cucamonga which has a capacity of 44 MGD and an average flow of 28 MGD. The Wastewater Treatment Plants are expected to have adequate capacity to service the Regional Collection System's needs through 2030.

The project would not have a cumulatively significant impact on wastewater infrastructure because it would not require the expansion of existing infrastructure; it would only require connections to existing infrastructure. By adhering to the wastewater treatment requirements established by the Santa Ana Regional Water Quality Control Board (RWQCB) through the NPDES permit, wastewater from the project site that is processed through wastewater Regional Plant No.4 would meet established standards. As the wastewater from all development within the service area of IEUA would be similarly treated under the NPDES, no cumulatively significant exceedance of RWQCB wastewater treatment requirements would occur.

5.19.1.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-1.

5.19.1.8 Mitigation Measures

No mitigation measures would be required.

5.19.1.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.19.2 WATER SUPPLY AND DISTRIBUTION SYSTEMS

5.19.2.1 Environmental Setting

Regulatory Background

Federal

Federal Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), the principal federal law intended to ensure safe drinking water to the public, was enacted in 1974 and has been amended several times since it came into law. The Act authorizes the U.S. Environmental Protection Agency (EPA) to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Water Resources Control Board (SWRCB) conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

State

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.), which was passed in California in 1969 and amended in 2013, the SWRCB has authority over State water rights and water quality policy. This Act divided the state into nine regional basins, each under the jurisdiction of a RWQCB to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The City of Rancho Cucamonga is overseen by the Santa Ana RWQCB.

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands in normal, single-dry, and multiple-dry years.
- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Implements conservation strategies and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (SBX7-7), which amends the act and adds new water conservation provisions to the Water Code.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet of water per year (afy) should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years.

Mandatory Water Conservation

Following Governor Brown's declaration of a state of emergency on July 15, 2014, the SWRCB adopted Resolution No. 2014-0038. The emergency regulation was partially repealed by Resolution No. 2017-0024. The remaining regulation prohibits several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; (3) the application of potable water to driveways and sidewalks; (4) the use of potable water to outdoor landscapes during ornamental fountains; and (5) the application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall. The SWRCB resolution also directed urban water suppliers to submit monthly water monitoring reports to the SWRCB.

The Water Conservation Act of 2009 (Senate Bill X7-7)

The Water Conservation Act of 2009, SB X7-7, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water use by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for state water grants or loans. The SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards, it also requires that agricultural water suppliers prepare plans and implement efficient water management practices.

2015 Update of the State Model Water Efficient Landscape Ordinance (MWELO) (Per Governor's Executive Order B-29-15)

To improve water savings in the landscaping sector, the DWR updated the Model Ordinance in accordance with Executive Order B-29-15. The Model Ordinance promotes efficient landscapes in new developments and retrofitted landscapes. The Executive Order calls for revising the Model Ordinance to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf.

New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. This applies to residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review. The previous landscape size threshold for new development projects ranged from 2,500 square feet to 5,000 square feet.

Chapter 17.82.020 of the City's municipal code adopts an ordinance that incorporates updates consistent with the 2015 State MWELO update.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11) establishes mandatory residential and nonresidential measures for water efficiency and conservation under Sections 4.3 and 5.3. The provisions establish the means of conserving water used indoors, outdoors, and in wastewater conveyance. The code includes standards for water-conserving plumbing fixtures and fittings and the use of potable water in landscaped areas.

Principles Governing CEQA Analysis of Water Supply

In Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova (February 1, 2007), the California Supreme Court articulated the following principles for analysis of future water supplies for projects subject to CEQA:

- To meet CEQA's informational purposes, the EIR must present sufficient facts to decision makers to evaluate the pros and cons of supplying the necessary amount of water to the project.
- CEQA analysis for large, multiphase projects must assume that all phases of the project will eventually be built, and the EIR must analyze, to the extent reasonably possible, the impacts of providing water to the entire project. Tiering cannot be used to defer water supply analysis until future phases of the project are built.
- CEQA analysis cannot rely on "paper water." The EIR must discuss why the identified water should reasonably be expected to be available. Future water supplies must be likely rather than speculative.
- When there is some uncertainty regarding future availability of water, an EIR should acknowledge the degree of uncertainty, include a discussion of possible alternative sources, and identify the environmental impacts of such alternative sources. Where a full discussion still leaves some uncertainty about long-term water supply, mitigation measures for curtailing future development in the event that intended sources become unavailable may become a part of the EIR's approach.
- The EIR does not need to show that water supplies are definitely ensured, because such a degree of certainty would be "unworkable, as it would require water planning to far outpace land use planning." The requisite degree of certainty of a project's water supply varies with the stage of project approval. CEQA does not require large projects, at the early planning phase, to provide a high degree of certainty regarding long-term future water supplies.
- The EIR analysis may rely on existing urban water management plans, as long as the project's demand was included in the water management plan's future demand accounting.
- The ultimate question under CEQA is not whether an EIR establishes a likely source of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.

Local

City of Rancho Cucamonga General Plan

The City of Rancho Cucamonga General Plan states that water conservation is a higher priority now that Cucamonga Valley Water District is committed to obtaining more water from local groundwater sources. As a result, the General Plan has Policy PF-5.1 aimed at expanding local water supply and distribution, and Policy PF-5.3, which encourages the City to work with the Cucamonga Valley Water District to expand recycled water availability to existing private development. Other policies that help to promote water supply and distribution sustainability include Policies RC-2.1, RC-2.2, and RC-2.5 through RC-2.7, which address groundwater replenishment, water conservation, promoting xeriscaping and the reuse of greywater where appropriate.

City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code prohibits non-stormwater discharges unless authorized by the city engineer or the Santa Ana RWQCB provided that they are in compliance with discharge limitations specified by RWQCB (Section 19.20.220). All qualifying land development or redevelopment projects are required to have a water quality management plan that has been approved by the city engineer (Section 19.20.260).

Standard Conditions of Approval

There are no existing regulations that reduce impacts to water supply and distribution systems.

5.19.2.2 Existing Conditions

Water Sources

The CVWD's three main sources of water include (1) groundwater, (2) local canyon runoff (surface and subsurface flows) and (3) imported surface water delivered through the Metropolitan Water District of Southern California (MWD). In addition, recycled water is a major component of the CVWD's future water supply. On average, from Fiscal Year (FY) 2011 to FY 2020 CVWD received 47 percent of its water from groundwater, 6 percent from canyon water and surface water, 45 percent from imported water, and 2 percent from recycled water (CVWD 2021). These water supply sources are discussed further below. Table 5.19-1 summarizes the current and planned sources of water available to CVWD through 2045 as provided in the 2020 CVWD Urban Water Management Plan (UWMP).

Water Source	2020 ¹	2025 ²	2030 ²	2035 ²	2040 ²	2045 ²
Groundwater – Chino Basin	23,315	10,250	14,773	16,331	17,630	17,630
Groundwater – Cucamonga Basin	3,618	10,000	10,000	10,000	10,000	10,000
Surface Water	4,744	2,950	2,950	2,950	2,950	2,950
Imported Water	14,343	28,369	28,369	28,369	28,369	28,369
Recycled Water - Direct Use	1,038	1,800	2,000	2,000	2,000	2,000
Recycled Water – Groundwater Recharge	4,458	4,000	4,000	4,000	4,000	4,000
Total	51,516	57,369	62,092	63,650	64,949	64,949

Table 5.19-1 Current and Planned CVWD Water Supplies (AFY)

Notes:

1 This represents the actual quantities of water supply available to CVWD.

2 This represents the reliable quantities of projected water supply available to CVWD during average years. Source: CVWD 2021

Groundwater

There are two groundwater basins that underlie the CVWD's service area: Chino Basin and Cucamonga Basin. On average, from FY 2011 to FY 2020, the groundwater supply from the Chino Basin accounted for 34 percent of the CVWD main water supply and the Cucamonga Basin accounted for 13 percent. In 2020, 23,315 AFY were pumped from Chino Basin and 3,618 AFY were pumped from the Cucamonga Basin.

The Chino Basin is one of the largest groundwater basins in Southern California and contains several million acre-feet (MAF) of water and has an unused storage capacity exceeding 1,000,000 acre-feet. The CVWD has annual pumping rights to 18.3 percent of total Chino Basin rights which is approximately 7,455.47 AFY for the Operating Safe Yield (CVWD 2021).

The Cucamonga Basin is located in the northern part of the Upper Santa Ana Valley and is drained by the Cucamonga and the Deer Creeks to the Santa Ana River. The CVWD currently has the right to produce 15,471 AFY (approximately 75 percent of total rights) from the Cucamonga Basin with additional right to divert 3,620 AFY from the Cucamonga Creek (CVWD 2021).

Canyon and Surface Water

The CVWD has several tunnel water sources (considered to be surface water sources) which originate in the canyons of the San Gabriel Mountains. These tunnel water sources come from streams, springs and tunnels in the Cucamonga Canyon, Deer Canyon and Day Canyon, and East Etiwanda Canyon of the San Gabriel Mountains and are treated prior to distribution. Over the past five years, the CVWD has produced 1,002 AFY to 4,900 AFY, with an average of 2,784 AFY from its tunnel sources (CVWD 2021).

Imported Water

The IEUA is responsible for responsible for importing water from the MWD. MWD supplies about half the water used in southern California from its two main sources of water: water from the State Water project(SWP) delivered via the California Aqueduct and water from the Colorado River delivered via the Colorado River Aqueduct (IEUA 2021).

Recycled Water

Aa discussed above in Section 5.19.1.2, the wastewater generated within the CVWD's service area is discharged to the IEUA, which provides regional wastewater service to its member agencies. The IEAU provides a portion of its recycled water back to the CVWD which is utilized as direct use or groundwater recharge.

Water Quantity

The city relies primarily upon the CVWD to provide water for development. A close working relationship between the City and CVWD is needed to ensure that our growth does not exceed their ability to provide service. In addition to a collaborative development process, the City also encourages water conservation and actively reviews policies to ensure that water is used efficiently in all development. The City is also fortunate to contribute to groundwater recharge. In chapter 5.10, *Hydrology*, Figure 5.10-1, *Water Basin*, shows several flood control basins and natural channels throughout the city that are designed to allow for recharge of groundwater through rainfall. This General Plan continues to conserve these areas and includes additional policies to preserve natural drainages. One key component of stormwater management, as implemented by the City, is that development is required to retain some stormwater onsite.

5.19.2.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- U-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

5.19.2.4 Plans, Programs, and Policies

- **GOAL RC-2** WATER RESOURCES. Reliable, readily available, and sustainable water supplies for the community and natural environment.
- **RC-2.1** Water Supplies. Protect lands critical to replenishment of groundwater supplies and local surface waters (Figure RC-3).
- **RC-2.2 Groundwater Recharge**. Preserve and enhance the existing system of stormwater capture for groundwater recharge.
- **RC-2.3 Riparian Resources**. Promote the retention and protection of natural stream courses from encroachment, erosion, and polluted urban runoff.
- **RC-2.4** Waterways as Amenities. When considering new development applications and infrastructure improvements where waterways are onsite, adjacent, or nearby, incorporate the waterway into the design as a feature.

- **RC-2.5** Water Conservation. Require the use of cost-effective methods to conserve water in new developments and promote appropriate water conservation and efficiency measures for existing businesses and residences.
- **RC-2.6** Irrigation. Encourage the conversion of water-intensive turf/ landscape areas to landscaping that uses climate- and wildfire appropriate native or non-invasive plants, efficient irrigation systems, greywater, and water efficient site maintenance.
- **RC-2.7 Greywater**. Allow and encourage the use of greywater to meet or offset onsite non-potable water demand.

5.19.2.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.19-2: Water supply and delivery systems are adequate to meet project requirements. [Thresholds U-1 (part) and U-2]

Rancho Cucamonga is served by CVWD for water and operates the water delivery systems to customers. The current and planned sources of water available through at least 2045, listed in Table 5.19-1, show the volumes of water expected to be available for decades to come. The population within CVWD's service area is expected to increase to 236,573 by 2045 from the current population of approximately 198,979. CVWD projects that it will have adequate water supplies through 2045. In addition, water conservation efforts by CVWD and the City will help to make the city more resilient during drought periods and future climate change impacts. Therefore, the impact would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.19-2 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance After Mitigation: Impact 5.19-2 would be less than significant.

5.19.2.6 Cumulative Impacts

The area considered for cumulative impacts to water supply services is the CVWD service area. Existing and future development within the CVWD's service area would demand additional quantities of water. The adopted UWMP projects population within the service area to increase to 235,573 persons by the year 2045. Increases in population, development, and intensity of uses would contribute to increases in the overall regional water demand. Water conservation and recycling measures would reduce the need for increased water supply. Overall, however, total demand is expected to increase from the current average of 44,486 AFY to 58,949 AFY in the year 2045.

CVWD will continue to rely on the plans and policies outlined in its UWMP to address water supply shortages and interruptions (including potential shutdowns of SWP pumps) to meet water demands. An aggressive campaign for voluntary conservation and recycled water usage, curtailment of groundwater replenishment water, and agricultural water delivery are some of the actions outlined in the Regional UWMP. MWD has analyzed the reliability of water delivery through the SWP and the Colorado River Aqueduct and have concluded that, with the storage and transfer programs developed by MWD, there will be a reliable source of water to serve its member agencies' needs through 2040. The CVWD would have water supplies for projected growth through 2040 in wet, dry, and multiple-dry years.

As development occurs, each project will be required to assess its separate and cumulative effect on water supply and water treatment/delivery systems. The existing and future land use patterns/designations and demographic projects for the CVWD service area are taken into consideration during the development of local and regional water planning documents. As CVWD and MWD have established that current and future water supplies are sufficient to address normal, single dry year, and multiple dry year conditions, no cumulatively significant water supply or delivery impact would occur.

5.19.2.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-2

5.19.2.8 Mitigation Measures

No mitigation measures would be required.

5.19.2.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.19.3 STORM DRAINAGE SYSTEMS

5.19.3.1 Environmental Setting

Regulatory Background

State

The SWRCB has adopted a statewide Construction General Permit (Order No. 2012-0006-DWQ) for stormwater discharges associated with construction activity. These regulations prohibit the discharge of stormwater from construction projects that include one acre or more of soil disturbance. Construction activities subject to this permit include clearing, grading, and other disturbance to the ground, such as stockpiling or excavation, that results in soil disturbance of at least one acre of total land area. Individual developers are required to submit Permit Registration Documents (PRD) to the SWRCB for coverage under the NPDES permit prior to the start of construction. The PRDs include a Notice of Intent, risk assessment, site map, Stormwater Pollution Prevention Plan (SWPPP), annual fee, and a signed certification

statement. The PRDs are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTS) website.

The NPDES Construction General Permit requires all dischargers to (1) develop and implement a SWPPP that specifies BMPs to be used during construction of the project; (2) eliminate or reduce non-storm water discharge to stormwater conveyance systems; and (3) develop and implement a monitoring program of all specified BMPs. The two major objectives of the SWPPP are to (1) help identify the sources of sediment and other pollutants that affect the water quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-storm water discharges.

State Water Quality Control Board's Trash Amendment

On April 7, 2015, the SWQCB adopted an amendment to the Water Quality Control Plan for Ocean Waters of California to control trash. In addition, the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California added the section, Part 1 Trash Provisions. Together, they are collectively referred to as "the Trash Amendments". The purpose of the Trash Amendments is to provide statewide consistency for the RWQCBs in their regulatory approach to protect aquatic life, public health beneficial uses, and reduce environmental issues associated with trash in State waters, while focusing limited resources on high trash generating areas.

Regional

Municipal Stormwater (MS4) Permit

The project area lies within the jurisdiction of San Ana Regional Water Quality Control Board and is subject to the waste discharge requirements of NPDES MS4 Permit No. CAS 0109266 (Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100). The NPDES MS4 permit is intended to regulate the discharge of urban runoff to the MS4. Under the NPDES MS4 permit, the City is responsible for the management of storm drain systems within its jurisdiction. Cities are required to implement management programs, monitoring programs, implementation plans, and all applicable BMPs.

Local

City of Rancho Cucamonga Municipal Code

Floodplain Management Regulations

City of Rancho Cucamonga Municipal Code Chapter 19.12, Floodplain Management Regulations, restricts or prohibits structures and land uses within designated floodplains that do not comply with the regulations. This chapter requires that development be reasonably safe from flooding and not increase the base flood level by more than one foot where base flood elevations have been determined, but a floodway has not been designated. Projects that involve alteration or relocation of a watercourse are required to notify adjacent communities and the California Department of Water Resources of the relocation, provide the Federal Insurance Administration and FEMA with evidence of such notification, and ensure that the flood-carrying capacity within the altered or relocated portion of the watercourse is maintained.

Floodplain Management Regulations also require that flood hazard reduction measures be implemented in the floodplain areas, which would include anchoring, flood-resistant materials, drainage around structures, elevation of lowest floor above base flood elevation, floodproofing, elimination of floodwater infiltration or discharges from water and sewer lines; prohibition of floodway encroachment; and mobile home and recreational vehicle standards. Regulations for development in mudslide-prone and erosion-prone areas are also included.

Storm Water Discharge Regulations

City of Rancho Cucamonga Municipal Code Chapter 19.20 is known as the Storm Water and Urban Runoff Management and Discharge Control Ordinance. The ordinance was adopted to comply with the CWA, the California Porter-Cologne Water Quality Control Act, and the City's NPDES permit, and seeks to protect and enhance the quality of water bodies and water courses. The regulations address connections to the City's MS4 system, prohibited discharges, compliance with NPDES permits, implementation of BMPs, spill containment, immediate notification and written notification of accidental discharge, and property owner responsibility for illegal discharges.

Drainage Master Plans

The City of Rancho Cucamonga has adopted two drainage master plans for the eastern and the western sections of the city. The drainage master plans establish a means to collect revenue from development to offset the cost of constructing the drainage system. The City Master Plan of Drainage-Westside Area applies to the area located primarily between the Deer Creek Channel on the east and the Cucamonga Channel on the west. The Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage, identifies drainage facilities and fees for the area located along the western side of Etiwanda Avenue to the easterly City limits north of 4th Street. These drainage master plans address the flood control needs of a fully developed drainage area and identify the regional and local facilities needed to adequately convey a 100-year storm event.

Areas not covered by the two drainage master plans are expected to provide the needed storm drainage system as outlined in the applicable Specific Plan or Community Plan. Developers within these areas are responsible for completing the necessary drainage facilities not covered by the City's drainage master plans.

Standard Conditions of Approval

There are no existing regulations that reduce impacts to storm drainage systems.

5.19.3.2 Existing Conditions

Storm Drainage and Flood Control

Rancho Cucamonga's storm drainage and flood control system provides both regional and local drainage and provides debris basins and spreading grounds designed to reduce mud flows. The City, through its Engineering Services and Public Works Services Departments, is responsible for the localized facilities. The San Bernardino County Flood Control District is responsible for regional flood control facilities. Together, the City and the San Bernardino County Flood Control District coordinate the preparation of regional drainage plans. The City's drainage plans provide a drainage system consisting of regional mainline, secondary regional, and master plan facilities that will adequately convey a 100-year storm event based upon certain drainage criteria. The plans provide for the establishment of a drainage system hierarchy as shown in Table 5.19-2.

Stormwater Quality

The Federal Water Pollution Control Act (the "Clean Water Act") prohibits the discharge of any pollutant to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. With the adoption of the Water Quality Act of 1987, the Clean Water Act was amended to expressly require NPDES permits for discharges from municipal stormwater systems. In addition, the Porter-Cologne Water Quality Control Act requires discharges of pollutants to jurisdictional water of the State to obtain water discharge requirements in the form of an NPDES permit. In Rancho Cucamonga, NPDES permits for municipal stormwater discharges are issued by the Santa Ana RWQCB as part of its stormwater program. The Santa Ana Region issues permits to three counties—Orange, Riverside, and San Bernardino—and all incorporated cities within those counties. The City is a co-permittee under the regional NPDES permit for municipal stormwater discharges in San Bernardino County. Unchecked, stormwater runoff from the city can pollute local waterways and even groundwater, causing contamination that can last for generations. Current stormwater retention and filtration requirements address this for new development, however large areas of the city have already been built and the stormwater capture requirements only take effect once additional construction is proposed. As a result, the city relies on stormwater basins to capture debris and slow the speed of runoff to reduce erosion. Many water quality issues can be addressed by providing information to residents on the importance of keeping pollutants out of the stormwater system. This General Plan continues and expands the City's public service announcements, advertisements, or signage that reminds people of the connection between water features in the city.

Facility Type	Owner/Operator	Characteristics
Regional Mainline	San Bernardino County Flood	Open channels with a flow in excess of 3,000 cubic feet per second
Facilities	Control District	Debris basins or dams at the upstream end of Regional Mainline Facilities
		Spreading grounds, percolation basins and flood peak attenuation facilities on or adjacent to Mainline Regional channels

Table 5.19-2 Drainage System Hierarchy

Facility Type	Owner/Operator	Characteristics
Secondary Regional Facilities	San Bernardino County Flood Control District	Smaller area than that of the Regional Mainline Facility Open channels with a minimum flow of 750 cubic feet per second Flood peak attenuation facilities adjacent to Regional Mainline Facilities Interceptor channels collecting debris laden mountain runoff
Master Plan Facilities	City of Rancho Cucamonga	Serve a minimum drainage area of 80 acres Consist of reinforced concrete pipe (RCP) with a minimum diameter of 48 inches Facility may consist of RCP or open channel
Local Drainage Facilities	City of Rancho Cucamonga	Serve a local drainage area or combination of local drainage areas not meeting the minimum criteria for a Master Plan Facility Consist of an RCP with a minimum main line diameter of 24 inches May consist of RCP or open channel Local drainage does not include private on-site systems
Interim Drainage Facilities	N/A	Optional Interim Regional and Master Planned retention basins to be used prior to the construction of the ultimate Regional and/or Master Planned Facilities

Source: General Plan Update PlanRC 2040 Volume 2

5.19.3.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

5.19.3.4 Plans, Programs, and Policies

- **GOAL PF-5 WATER-RELATED INFRASTRUCTURE.** Water and wastewater infrastructure facilities are available to support future growth needs and existing development.
- **PF-5.1 Water Treatment**. Support the efforts of the CVWD and San Bernardino County agencies to provide and expand water treatment facilities to treat local water sources from canyon surface waters and groundwater.
- **PF-5.2** Wastewater Treatment. Consult with the Inland Empire Utilities Agency and the Cucamonga Valley Water District (CVWD) to ensure that the treatment facility has sufficient capacity to meet future wastewater treatment needs.
- **PF-5.3 Recycle Water**. Work with the CVWD to expand the recycled water program to include existing private development.

5.19.3.5 Environmental Impacts

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.19-3: Existing and/or proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project. [Threshold U-1 (part)]

Rancho Cucamonga's storm drainage and flood control system provides both regional and local drainage and provides debris basins and spreading grounds designed to reduce mud flows. The City, through its Engineering Services and Public Works Services Departments, is responsible for the localized facilities. The San Bernardino County Flood Control District is responsible for regional flood control facilities. Together, the City and the San Bernardino County Flood Control District coordinate the preparation of regional drainage plans. The City's drainage plans provide a drainage system consisting of regional mainline, secondary regional, and master plan facilities that will adequately convey a 100-year storm event based upon certain drainage criteria.

Development in the undeveloped portions of the City that have no flood control improvements would have to provide the necessary infrastructure to accommodate storm drain needs. Also, development within the Industrial Specific Plan may be required to provide on-site detention facilities to prevent flood hazards. Continued implementation of the Master Plan of Drainage-Westside Area and the Etiwanda/San Sevaine Area Drainage Policy, with its associated Etiwanda Area Master Plan of Drainage, would fund the improvement of the storm drainage systems in these areas. Storm drainage system improvements in other areas of the city are constructed in accordance with the storm drain plan in the applicable Specific Plan or Community Plan. Compliance with this standard condition would result in the development and/or improvement of the storm drainage systems and prevention of flood hazards. The potential environmental impacts of construction of the necessary storm drain facilities would be assessed on a project-by-project basis as proposed projects pursuant to the General Plan Update is implemented.

Thus, impacts related to flooding or drainage system capacity of water bodies downstream of the site would be reduced to less than significant levels.

LEVEL OF SIGNIFICANCE

Level of Significance After Mitigation: Impact 5.19-3 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance After Mitigation: Impact 5.19-3 would be less than significant.

5.19.3.6 Cumulative Impacts

Cumulative impacts are considered for the Santa Ana River watershed in southwestern San Bernardino County. Other projects in the watershed may increase the amount of impervious surfaces and therefore, may increase flow rates and volumes of runoff entering storm drains in the region. Other projects in the watershed would be required by MS4 permits to be sized and designed to ensure onsite retention of the volume of runoff produced from a 24-hour, 85th percentile storm event, which is similar to a 2-year storm. Other impacts to storm drainage would be analyzed in separate CEQA processing for each cumulative project, and mitigation measures would be required as appropriate to minimize significant impacts. Therefore, the impacts would not be cumulatively considerable.

5.19.3.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-3.

5.19.3.8 Mitigation Measures

No mitigation measures are required.

5.19.3.9 Level of Significance After Mitigation

Impacts would be less than significant.

5.19.4 SOLID WASTE

5.19.4.1 Environmental Setting

Regulatory Background

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

California Integrated Waste Management Act

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties throughout California to divert 50 percent of all solid waste from landfills as of January 1, 2000 through source reduction, recycling, and composting. To help achieve this, the Act requires that each city and county prepare a Source Reduction and Recycling Element to be submitted to the Department of Resources Recycling and Recovery (CalRecycle). AB 939 also

established a goal for all California counties to provide at least 15 years of ongoing landfill capacity.

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by the jurisdiction's population. The California Integrated Waste Management Board was replaced by CalRecycle in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate.

California Solid Waste Reuse and Recycling Act of 1991

The California Solid Waste Reuse and Recycling Access Act (AB 1327, California Public Resources Code Sections 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Assembly Bills 341, and 1826

Assembly Bill 341 (Chapter 476) set a statewide solid waste diversion goal of 75 percent by 2020. AB 341, which was passed in 2011 and took effect July 1, 2012, mandates recycling for businesses producing four or more cubic yards of solid waste per week or multi-family residential dwellings of five or more units. Under AB 341, businesses and multi-family dwellings of five or more units must separate recyclables from trash and then either subscribe to recycling services, self-haul their recyclables, or contract with a permitted private recycler.

AB 1826 (California Public Resources Code Sections 42649.8 et seq.), signed into law in September 2014, requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. This law also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses. The law took effect in April 2016.

California Green Building Standards Code

CALGreen establishes building standards for sustainable site development. Sections 4.408 and 5.408, Construction Waste Reduction Disposal and Recycling, mandate that, in the absence of a more stringent local ordinance, a minimum of 65 percent of non-hazardous construction and demolition debris generated during most new construction must be recycled or salvaged. CALGreen requires developers to prepare and submit a Waste Management Plan for on-site sorting of construction debris, which is submitted to the City for approval, or use a waste management company with verifiable documentation. The Waste Management Plan must:

- Identify the materials to be diverted from disposal by recycling, reuse on the project, or salvage for future use or sale
- Specify if materials will be sorted on-site or mixed for transportation to a diversion facility
- Identify the diversion facility where the material collected can be taken

- Identify construction methods employed to reduce the amount of waste generated
- Specify that the amount of materials diverted shall be calculated by weight or volume, but not by both

Local

City of Rancho Cucamonga Municipal Code

The Rancho Cucamonga Municipal Code assigns the city council to have sole discretion on deciding which of one or more solid waste enterprises will provide solid waste and recyclable collection services for residential and commercial/industrial customers within the City (Section 8.17.030). In addition, construction and demolition waste providers must have a collection agreement with the City before collecting or disposing of those types of wastes (Section 8.19.010).

Standard Conditions of Approval

There are no existing regulations that reduce impacts to solid waste facilities.

5.19.4.2 Existing Conditions

Integrated Waste Management

Integrated Waste Management contributes to Healthy RC goals by focusing on reducing materials that enter the landfill through encouraging waste reduction, re-use, recycling, and composting. Minimizing the volume of trash that enters landfills conserves resources and protects the environment from the negative impacts associated with waste disposal. As landfill space diminishes, minimizing trash volumes become even more necessary to reduce demand on nonrenewable resources. Using recycled products also lowers energy consumption, as manufacturing new products from recycled materials often uses significantly less energy than manufacturing from raw materials. Reducing the amount of waste going to landfills also helps curb global warming, as waste in landfills decomposes anaerobically and produces methane, which has approximately 23 times more greenhouse gas effects than CO2. Solid waste collection, transport, and disposal are handled by a contracted private firm that hauls collected materials to several regional landfills and materials recovery facilities. For household waste disposal, Rancho Cucamonga utilizes a three-container system for recycling, organics collection, and waste disposal. Black bins allow for the collection of pet waste, diapers, tissues, plastic wrap, and non-recyclable items, a blue bin allows for recyclable materials including paper, cartons, metal cans and trays, glass bottles and jars, and plastic container items, and the green bin allows for landscape waste such as grass clippings, brush, pruning, leaves, tree trimmings, twigs, weeds. Solid waste generated in the city is transferred to Burrtec's West Valley Materials Recovery Facility (MRF), located immediately southeast of the City at 13373 Napa Street in Fontana. Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill, a County Class III (i.e., municipal waste) landfill located at 2390 North Alder Avenue in Rialto. Mid-Valley Landfill has a daily permitted capacity of 7,500 tons per day (tons/day), a remaining capacity of 61,219,377 cubic yards (cy), and an anticipated close date of 2045 (CalRecycle 2021). The city also implements various programs with local businesses and public agencies to increase recycling efforts. See Table 5.19-3 for additional recycling programs.

Table 5.19-3 Recycling Programs

Program Types	Programs
Composting	Residential Curbside Green Waste Collection Commercial Self-Haul Green Waste Food Waste Composting
Facility Recovery	Material Recovery Facility Landfill Composting Facility
Household Hazardous Waste	Permanent Facility Education Programs
Policy Incentives	Product and Landfill Bans Economic Incentives Ordinances
Public Education	Electronic (radio, television, web, telephone hotlines) Print (brochures, flyers, guides, news articles) Outreach (technical assistance, presentations, awards, fairs, field trips)
Recycling	Residential Curbside Residential Buy-Back Commercial On-Site Pickup School Recycling Programs Government Recycling Programs Special Seasonal Collection (regular) Other Recycling
Source Reduction	Water Efficient Landscaping Backyard and On-Site Composting/Mulching Business Waste Reduction Program Procurement Government Source Reduction Programs Material Exchange, Thrift Shops
Special Waste Materials	White Goods Scrap Metal Wood Waste Concrete/Asphalt/Rubble

Source: California Integrated Waste Management Board, 2008.

5.19.4.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-4 Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- U-5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.19.4.1 Plans, Programs, and Policies

- **GOAL PF-6 SOLID WASTE.** The volume of solid waste that enters regional landfills is minimized and the amount of recycling increased
- **PF-6.1 Recycling**. Encourage Recycling and Organics collection and processing in all sectors of the community to divert items from entering landfills.
- **PF-6.2 Refuse Facilities**. Consult with public agencies and private contractors to ensure adequate organics processing facilities are available.

5.19.4.2 Environmental Impacts

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.19-4: Existing and/or proposed facilities would be able to accommodate projectgenerated solid waste. [Thresholds U-4]

Solid waste collection, transport, and disposal are handled by a contracted private firm that hauls collected materials to several regional landfills and materials recovery facilities. For household waste disposal, Rancho Cucamonga utilizes a three-container system for recycling, organics collection, and waste disposal. Solid waste generated in the city is transferred to Burrtec's West Valley MRF. Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill which has a remaining capacity of 61,219,377 cubic yards (cy), and an anticipated close date of 2045. Thus, existing facilities have ample capacity to accommodate increased volumes of waste from the city through 2040, and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.19-4 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance After Mitigation: Impact 5.19-4 would be less than significant.

Impact 5.19-5: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. [Thresholds U-5]

The proposed project would comply with the CALGreen Building Code Standards, which requires that at least 65 percent of nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. Furthermore, the proposed project would also comply with the requirements of AB 341 that mandates recycling for commercial land uses. Additionally, any organic waste generated in amounts over a certain threshold would be recycled in accordance with AB 1826. Therefore, the proposed project would comply with all applicable federal, State, and local solid waste regulations and impacts would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.19-5 would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Level of Significance After Mitigation: Impact 5.19-5 would be less than significant.

5.19.4.3 Cumulative Impacts

Cumulative impacts are considered for the service area of the Mid-Valley Landfill. Cumulative projects would result in increased generation of solid waste that would need to be processed at the landfill. The Mid-Valley Landfill has a daily maximum throughput of 7,500 TPD, a remaining capacity of 61,219,377 cubic yards, and an estimated cease date of 2045. In addition to the Mid-Valley Landfill, four additional regional landfills are available to supplement disposal capacity. With planned expansion activities of landfills in the project vicinity and projected growth rates contained in the City's General Plan EIR, sufficient landfill capacity exists to accommodate future disposal needs through 2040. Therefore, development according to the City General Plan would not create demands for solid waste services that would exceed the capabilities of the County's waste management system. No significant cumulative impact to landfill capacity would occur, and the proposed project would not contribute to a significant cumulative impact.

5.19.4.4 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-4.

5.19.4.5 Mitigation Measures

No mitigation measures are required.

5.19.4.6 Level of Significance After Mitigation

Impacts would be less than significant.

5.19.5 REFERENCES

Cucamonga Valley Water District (CVWD). 2017, March. Sewer Master Plan.

_____.2021 June. 2020 Urban Water Management Plan.

Inland Empire Utilities Agency (IEUA). 2021, June. 2020 Urban Water Management Plan.

CalRecycle. 2021, August 2 (accessed). SWIS Facilities/Site Activity Details, Mid-Valley Sanitary Landfill (36-AA-0055). <u>https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1880?siteID=2662</u> This page intentionally left blank.

5.20 WILDFIRE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Rancho Cucamonga General Plan Update to exacerbate wildfire risk or result in exposure of people or structures to significant wildfire risks in the city of Rancho Cucamonga and its sphere of influence (SOI). Cumulative impacts related to wildfire are based on regional wildfire hazards in the southern California region associated with proximity to wildlands and are based on Fire Hazard Severity Zones (FHSZ) mapped by the California Department of Forestry and Fire Protection (CAL FIRE). The analysis in this section is based in part on:

 City of Rancho Cucamonga General Plan Update Technical Background Report – Natural Hazards, May 2020.

A complete copy of this report is included as Appendix 2-1 to this DEIR.

Chapter Overview

This chapter provides an overview of the wildfire risks present in the city of Rancho Cucamonga and its SOI. As shown on Figures 5.20-2 and 5.20-3, the city and SOI include areas within both the CAL FIRE designated *Very High Fire Hazard Severity Zone* and the Wildland Urban Interface Area, primarily in the northern portion of the City and covering all of the SOI. Additionally, there is some risk of landslide and flooding, after the occurrence of wildfire. Although wildfire risks are present in the City and SOI, with adherence to the building practices and policies included in this chapter, buildout under the General Plan Update would have less than significant wildfire risks.

Heart of the Matter

The City of Rancho Cucamonga is situated in the heart of the Inland Empire just south of the San Gabriel Mountains and the San Bernardino National Forest. Although Rancho Cucamonga's location and prevalence of open space affords a multitude of recreational opportunities, its location also makes it susceptible to wildfires, earthquakes, and floods. Although policies in the General Plan Update address new development near hazard areas to reduce the risks of potential hazards, the residents of Rancho Cucamonga will continue to be vulnerable to hazards. To better disclose the potential harm that could result in injury, loss of life, property damage, and monetary loss, Rancho Cucamonga has developed a comprehensive suite of plans, analyses, and emergency plans that address local hazards. These plans play a critical role in protecting residents and businesses and ensuring continuity of operations and governance. References to the plans are included in the General Plan Update.

5.20.1 ENVIRONMENTAL SETTING

5.20.1.1 Regulatory Background

Federal Regulations

National Fire Protection Association Standards

National Fire Protection Association (NFPA) codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. NFPA standards are recommended (advisory) guidelines in fire protection but are not laws or "codes" unless adopted or referenced as such by the California Fire Code or local fire agency. Specific standards applicable to wildland fire hazards include, but are not limited to:

- NFPA 1141, Fire Protection Infrastructure for Land Development in Wildlands
- NFPA 1142, Water Supplies for Suburban and Rural Fire Fighting
- **NFPA 1143**, Wildland Fire Management
- NFPA 1144, Reducing Structure Ignition Hazards from Wildland Fire
- NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations

State Regulations

CAL FIRE

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Board of Forestry and Fire Protection is a regulatory body within CAL FIRE. It is responsible for developing the general forest policy of the state, for determining the guidance policies of the Department and for representing the state's interest in federal forestland in California. The Board of Forestry and Fire Protection also promulgates regulations and reviews general plan safety elements that are adopted by local governments for compliance with statutes. Together, the Board and the CAL FIRE protect and enhance the forest resources of all the wildland areas of California that are not under federal jurisdiction.

Office of State Fire Marshal

The California Office of the State Fire Marshal supports the mission of CAL FIRE by focusing on fire prevention. Its fire safety responsibilities include: regulating buildings in which people live, congregate, or are confined; 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 within wildland areas; by regulation hazardous liquid pipelines; by developing and reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities. These achievements are accomplished through major programs including engineering, education, enforcement, and support from the State Board of Fire Services.

California Fire Code

The California Fire Code is a series of building, property, and lifeline codes in the California Code of Regulations, Title 24, Chapter 9. The California Fire Code contains fire-safety-related building standards, such as construction standards, vehicular and emergency access, fire hydrants and fire flow, and sprinkler requirements. Specific chapters relevant to wildfire include Chapter 49, Requirements for Wildland-Urban Interface, and Chapter 7A of the California Building Code, Materials and Construction Methods for Exterior Wildfire Exposure. Rancho Cucamonga adopts the updated Fire Code and numerous appendices B, C, E, F, and G, but not the voluntary Appendix D standards, every three years. Amendments are also made to the Code, including requirements for property addressing and signage, Class A roofing, automatic fire alarm and sprinkler system installation fire hydrants, eave protection, and fire flow and access.

California Public Resources Code

The Board of Forestry and Fire Protection is authorized in the Public Resources Code (§§ 4290 and 4291) to adopt minimum fire safety standards for new construction in VHFHSZs in SRAs. The Board publishes its fire safety regulations in the California Code of Regulations, Title 14. (These standards may differ from those in Appendix D of the California Fire Code.) Fire safe regulations currently address:

- Article 1: Administration of ordinance and defensible space measures (Chapter 49)
- Article 2: Emergency access and egress standards (roadways) (Appendix D)
- Article 3: Standards for signs identifying streets, roads, and buildings (Chapter 5)
- Article 4: Emergency water standards for fire use (Appendix B, BB)
- Article 5: Fuel modification standards (Chapter 49)

Local ordinances adopted by local governments cannot be less restrictive than the provisions in state law. These regulations would be applied in SRAs outside of the city's boundaries, such as the SOI and surrounding unincorporated lands.

California Building Code

The California Building Code requires the installation and maintenance of smoke alarms in residential dwelling units:

 CCR Title 24, Part 2, Section 907.2.11.2. Smoke alarms shall be installed and maintained on the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms. In each room used for sleeping purposes, and in each story within a dwelling unit. The smoke alarms shall be interconnected.

California General Plan Law, OPR General Plan Guidelines

Government Code § 65302 requires that safety elements be revised periodically to address wildfire risks in accordance with regulations and guidance promulgated by the Board of Forestry and Fire Protection. In addition, cities must submit a revised safety element to the Board for consideration and comments no later than 90 days prior to its adoption. Local governments must also respond to how they plan to address the Board's comments or make findings to the contrary prior to adoption of the safety element.

To meet the intent of state law, SB 1241 requires the safety element to:

- Identify wildfire hazards with the latest state-prepared, very high fire severity zone maps from the Board of Forestry and Fire Protection, US Geological Survey, and other sources.
- Consider guidance given by the Office of Planning and Research's (OPR) Fire Hazard Planning document (OPR 2015).
- Demonstrate that the City or contract agency and associated codes satisfactorily address adequate water supply, egress requirements, vegetation management, street signage, land use policies, and other criteria to protect from wildfires.
- Establish in the safety element (and other elements that must be consistent with it) a set of comprehensive goals, policies, and feasible implementation measures for protection of the community from unreasonable risks of wildfire.

Local Regulations

County

CAL FIRE s Strategic Fire Plan for the San Bernardino Unit

CalFire prepares a California Fire Strategic Plan to govern operations statewide. The California Strategic Plan is implemented through individual "unit plans" that are prepared for different regions of the state. CAL FIRE's fire suppression operations are organized into 21 units that geographically follow county lines. CAL FIRE has adopted the 2020/2021 Strategic Fire Plan for the San Bernardino Unit that covers San Bernardino, Inyo, and Mono Counties. The unit plan sets forth the agency's priorities for the prevention, protection, and suppression of wildfires. The overall goal of the Strategic Fire Plan is to reduce total costs and losses from wildland fire in the unit by protecting assets at risk through focused pre-fire management prescriptions increasing initial attack success. The last unit plan was updated in 2020 (OSFM 2020).

County of San Bernardino MultizJurisdictional Hazard Mitigation Plan

The County of San Bernardino Multi-Jurisdictional Hazard Mitigation Plan (HMP) identifies the County's hazards, reviews and assesses past disaster occurrences, estimates the probability of future occurrences and sets goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The HMP is incorporated into the County of San Bernardino's General Plan and contains specific flood mitigation projects. The HMP also contains mitigation strategies and relevant policies from the Safety Element of the San Bernardino County General Plan (San Bernardino County 2017).

San Bernardino County Local Agency Formation Commission

Municipal Service reviews were added to the Local Agency Formation Commission's (LAFCO) mandate with the passage of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. A service review is a comprehensive study designed to better inform LAFCO, local agencies, and the community about the provision of municipal services. Service reviews attempt to capture and analyze information about the governance structures and efficiencies of service providers and to identify opportunities for greater coordination and cooperation between providers. The service review is a prerequisite to a Sphere of Influence update and may also lead a LAFCO to take other actions under its authority.

On June 16, 2012, the Commission adopted the Countywide Vision Statement, which the County of San Bernardino Board of Supervisors and the Board of Directors of the San Bernardino Associated Governments (SANBAG). The Statement outlines a vision for the County based on creating a broad range of choices for its residents in how they live, work, and play by capitalizing on the diversity of its people, geography, and economy. The Statement also addresses sustainability, education, community health, public safety, housing, natural resources and the environment, and a desire to create a destination for visitors, among others (LAFCO 2021).

Local

Rancho Cucamonga Fire Protection District

Formerly known as the Foothill Fire Protection District, the Rancho Cucamonga Fire Protection District (RCFPD) provides vital fire and life safety service to resident, visitors, and businesses in the city. The service area of the RCFPD covers 50-square miles and is staffed with seven fire stations. The Vision Statement of the RCFPD is that the Fire District is a cohesive team providing premier emergency and non-emergency services. The RCFPD has numerous fire standards incorporated into its operational permits (RCFPD 2021). A property owner or owner's authorized agent who intends to conduct an operation, business, use, or activity regulated by the Fire Code must obtain the required permit (Rancho Cucamonga 2020b).

Rancho Cucamonga Fire Protection District Strategic Plan

In 2005, the Rancho Cucamonga Fire Protection District completed an analysis and comprehensive review of service demands and resource allocation, which led to a Strategic Plan that provides fire protection and emergency services recommendations in the city. As stated in the Strategic Plan, the most significant fire threat to Rancho Cucamonga is the many miles of Wildland Urban Interface (WUI), defined as the area where urban development meets undeveloped wildlands, in the northern portion of the city. A combination of prevention and suppression strategies are used by the District to address the WUI fire threat and District firefighters develop specialized capabilities training and use equipment to prepare for and mitigate fire within the WUI. District firefighters participate on U.S. Forest Service incident management teams and annually participate in San Bernardino County's Preparedness Exercise to fine tune their skills on wildland firefighting techniques, as well as test preparation plans and inter-department communications. The Strategic Plan also calls for the (1) the development of a Wildfire Community Protection Plan; (2) a definition of the Very High Fire Hazard Severity Zone; (3) continued efforts to assess and identify high risk areas in the goals and objectives to the public; (5) development of fuel modification/brush abatement programs; and (6) a gates and lock access program (Rancho Cucamonga 2009).

Rancho Cucamonga Fire Code and Fire Protection Plan Requirements

The RCFPD requires a Fire Protection Plan for all development within hazardous fire areas, including the WUI. The Fire Protection Plan would be required to include mitigation measures consistent with the unique issues arising from the location, topography, geology, flammable vegetation, and climate of the proposed development site. Additionally, it must address water supply, access, ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. New developments have maintenance requirements for

incinerators, outdoor fireplaces, permanent barbeques and grills, and defensible space fuel modification areas. (Rancho Cucamonga 2009).

Rancho Cucamonga Emergency Management Division

The Rancho Cucamonga Emergency Management Division plans and prepares for disasters specific to Rancho Cucamonga and assist residents and businesses prepare before, during, and after a disaster. ReadyRC includes several preparedness and training programs designed to give residents the tools necessary to effectively mitigate, prepare, respond, and recover from community disasters such as fire, flood, windstorm, and earthquake. Trainings include safety and emergency preparedness presentations and classes, the Community Emergency Response Team (CERT) basic and advanced training class, the Business Emergency Resiliency Training (BERT) class, the ReadyRC Academy that prepares individuals for various emergencies and disasters, cardiopulmonary resuscitation (CPR) classes, fire extinguisher training, and the Amateur Radio Technician License training. The Large Animal Response Team is also a part of the Emergency Management Division and provides disaster preparedness resources for owners of a horse or large animal (Rancho Cucamonga 2020a).

Community Wildfire Planning Program

A Community Wildfire Planning Program (CWPP) is a program that is intended to reduce wildfire risk to communities, municipal water supplies, structures, and other at-risk land uses through a collaborative process of planning and implementing programs with federal, state, tribal, and county partners. The City is currently undertaking a Community Wildfire Protection Plan and the Public Review Draft will be circulated to the public upon completion. The Plan will help communities at risk to define the level of risk, assess vulnerability, and provide guidance for reducing risks, manage the vegetation fuels, increase preparedness, formulate the pre-fire response and evacuation plans, and increase community resiliency that allows residents and businesses to return living conditions to normal as quickly as possible (Rancho Cucamonga 2020b).

Vegetation Management

Vegetation management has become a key focus in fire prevention and control in California due to the periodic droughts facing many communities. The Rancho Cucamonga Fire District is responsible for managing the city's weed and fire hazard abatement provisions of the City's Municipal Code. Fire Protection Bureau inspectors routinely conduct a spring and a fall inspection ensure that weeds, dead trees, invasive grasses, tumbleweeds, and other vegetation debris are removed or maintained in accordance with the Municipal Code. Parcels that are not in compliance with the Municipal Code can be abated by the Fire District with cost passed on to the property owner (Rancho Cucamonga 2020b).

Rancho Cucamonga Local Hazard Mitigation Plan

The City is in the process of preparing a Local Hazard Mitigation Plan (LHMP). The LHMP will identify threats from natural and human-caused hazards in Rancho Cucamonga. The plan will also recommend specific strategies and actions to pro-actively decrease these threats before disasters cause them. Adoption of the LHMP will make Rancho Cucamonga eligible for mitigation grants through the Federal Emergency Management Agency (FEMA) to implement

the plans, strategies, and actions and further reduce risk. The LHMP will create a safer community for residents, businesses, and visitors (Rancho Cucamonga 2020b).

City of Rancho Cucamonga Municipal Code

The City of Rancho Cucamonga Municipal Code covers a broad range of regulations that address building construction codes, roadway access and egress, building signage, sprinkler requirements, among other aspects, including Chapter 8.46.020, *Duty to abate fire hazards,* which states that every owner of private real property within the boundaries of the city must abate all fire hazards from their property. Additionally, Chapter 8.46.050, *Immediate hazard,* states that when, according to the fire chief, an extreme fire hazard exists which constitutes an immediate threat to public health, safety, and welfare, the fire hazard shall be removed or abated within 72 hours of public noticing (Rancho Cucamonga 2014).

Building Code

Every public agency enforcing building regulations must adopt the provisions of the California Building Code (CBC), which is Title 24, Part 2 of the California Code of Regulations. The most recent version is the 2019 CBC (effective January 1, 2020). The CBC is updated every three years and provides minimum standards to protect property and public safety by regulating the design and construction of structures to ensure safety from wildfire risks. A city may adopt more restrictive codes than state law based on conditions in their community.

From the City Municipal Code (all numbering is from the adopted Code):

Chapter 15.12, Building Code: This Chapter adopts the 2019 California Building Code by reference.

Chapter 8.46, Abatement of Weeds and Certain Other Fire Hazards: The intent of this Chapter is to promote public safety and welfare by reducing the risk of fire hazards that may result from private property owner's negligence in abating all fire hazards from their property.

Fire Access

Clear emergency vehicle access along well-designed roadways is essential for effective fire suppression. Such access is regulated by the City-adopted and amended CFC and Rancho Cucamonga land development standards. City access and egress requirements are in accordance with the 2016 SRA Fire Safe Regulations.

Standard Conditions of Approval

There are existing regulations that reduce wildfire hazards to people, structures, and infrastructure. Compliance with these standard conditions by existing and future development and redevelopment would reduce the potential for personal injury and property damage associated with wildfire hazards in the city. Existing regulations that promote public safety during wildfire events or that prevent exposure to wildfire hazards include those standard conditions listed below.

5.9-1: Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology,

flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbeques and grills, and firebreak fuel modification areas are imposed on new developments.

Existing Conditions

Fire Environment

The city of Rancho Cucamonga has a complex interplay of factors affecting its fire environment. Numerous businesses in Rancho Cucamonga use, manufacture, or store hazardous materials. The city has approximately 60,000 housing units, many of which are two-to four-story structures and may have common household items and appliances that carry some level of fire risk and would require fire protection in an emergency. Additional structures and uses, such as senior facilities and other group living quarters require heightened levels of emergency medical services and fire suppression during fire related emergencies.

Although Rancho Cucamonga is highly urbanized, its SOI is composed of extensive open space areas that are susceptible to wildfire and encroachment into the community. The San Bernardino National Forest borders the northern portion of the city and has a high potential as a source of many wildfire. Vegetation found in the Etiwanda Preserve and other open space buffer zones are also susceptible to wildfire.

Urban Fire Environment

As shown in Table 5.15-3, *Rancho Cucamonga Fire Protection District Responses*, in Section 5.15, *Public Services*, from 2014 to 2018, the Rancho Cucamonga Fire Protection District responded to approximately 12,500 calls annually, although the volume has increased 15 percent over the last five years. During this five-year period, the greatest percentage of calls, 74 percent, involved emergency medical service and rescue. This category is primarily responsible for the 15 percent increase in the number of service calls over the same period.

Wildfire Environment

The city of Rancho Cucamonga, as does most of California, has a long history of wildfires threatening the community, which include fires at the WUI, resulting in a complex mix of fuels, properties, and threats. WUI Fires can damage critical infrastructure, such as electrical transmission towers, railroads, water reservoirs and tanks, and communications facilities. Over time, numerous wildfires have encroached into Rancho Cucamonga and its SOI. Table 5.20-1, *Recent Wildfire History in Rancho Cucamonga*, lists the major fires since 2013 in Rancho Cucamonga and its SOI as well as several large wildfires to the north in the San Bernardino National Forest (CAL FIRE 2021). Other, older fires that have occurred nearby the city of Rancho Cucamonga include the Grand Prix Fire and the Old Fire that burned large portions of the Angeles and San Bernardino National Forests in 2003. The Old Fire burned over 91,000 acres destroying over 1,200 structures. The Grand Prix Fire burned over 69,000 acres and destroyed nearly 200 residences. The Grand Prix Fire burned a large portion of the Wildland Urban Interface Areas (WUIFAs) adjoining the national forest and destroying 15 homes in the process

(Rancho Cucamonga 2020c). General Plan Figure 5.20-1, *Historic Wildfire Perimeters*, displays the perimeters for key historic wildfires that have occurred within the city from 1970 through 2014.

Year	Fire Incident	Description
2020	Brook Fire	Burned 185 acres in the San Bernardino National Forest north of Rancho Cucamonga.
2017	Freeway Fire	Burned 40 acres at I-15 and I-210 in Rancho Cucamonga.
2016	Ken Fire	Burned 20 acres off I-15 in the Cajon Pass in the San Bernardino National Forest.
2016	Blue Cut Fire	Burned 36,274 acres off I-15 and Highway 138 in the San Bernardino National Forest.
2015	North Fire	Burned 4,250 acres off I-15 in the Cajon Pass area in the San Bernardino National Forest.
2014	Etiwanda Fire	Burned 2,143 acres just north of Rancho Cucamonga in the city's SOI.
2013	Lytle Fire	Burned 75 acres off I-15 at Sierra Avenue, near Lytle Creek in Rancho Cucamonga's SOI.
2013	Sierra Fire	Burned 200 acres in the Cajon Pass west of I-15 in the San Bernardino National Forest.
2013	Cleghorn Fire	Burned 110 acres off I-15 at Cajon Pass south of Cleghorn Road in the San Bernardino National Forest.
2013	Gobblers Fire	Burned 413 acres at the upper end of Lytle Creek in the San Bernardino National Forest.

Table 5.20-1	Recent Wildfire Histor	v in Rancho Cucamong	a and its SOI
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Source: CAL FIRE 2021

Weed Abatement

As Rancho Cucamonga is surrounded by hillsides, maintaining existing fire breaks and clearing vegetation helps to prevent wildland fires from entering the community. Under a Cooperative Agreement with the California Department of Corrections and Rehabilitation (CDCR), CAL FIRE operates the Prado Conservation Camp and provides weed abatement in Rancho Cucamonga and the surrounding wildland areas (CDCR 2021).

Wildfire Hazard Severity Zones and Response

CAL FIRE is mandated by Public Resources Code §§ 4201–4204 and Government Code §§ 51175– 51189 to identify FHSZs for every community within California with the latest version dating to 2019. CAL FIRE has also mapped three hazard severity ranges—moderate, high, and very high based on fuels, terrain, weather, and other factors for most regions of California. Within the SOI, CAL FIRE requires compliance with SB 1241 and subsequent regulations to ensure appropriate standards are met, such as building and road standards. Government Code § 51179 allows a local agency to restrict or expand, at its discretion, the fire hazard severity zones identified by CAL FIRE. A City may: 1) exclude an area identified as a VHFHSZ from the requirements of §51182 following a finding supported by substantial evidence in the record that the § 51182 requirements are not necessary for effective fire protection in the area or 2) designate areas as a VHFHSZ in its jurisdiction that were not identified by CAL FIRE following a finding supported by substantial evidence that § 51182 requirements are needed for effective fire protection.

To address wildfire hazards and coordinate response, multiple government agencies (local, county, state, and federal) are responsible for fire suppression. These responsibility areas are generally described below.

- Local Responsibility Area (LRAs). These are areas where local jurisdictions (e.g., cities, districts, counties, and CAL FIRE if under contract) are responsible for the prevention and suppression of wildfires. The city covers the entire incorporated area, and the County/CAL FIRE serves portions of the sphere. The city provides secondary backup for areas covered by San Bernardino County Fire.
- State Responsibility Area (SRAs). These are the areas where the State of California has primary financial responsibility for fire prevention and suppression activities. SRA lands do not include lands within city boundaries or in federal ownership. CAL FIRE is the responsible state agency assigned to response and suppression of wildfires in Rancho Cucamonga's SOI and surrounding areas.
- Federal Responsibility Area (FRAs). These are areas where the federal government has primary financial responsibility for fire prevention and suppression activities. Around Rancho Cucamonga, the federal government (US Forest Service) is responsible for suppressing fires in the San Bernardino National Forest. Typically, USFS resources are deployed solely to FRA areas, but may assist elsewhere.

Figure 5.20-2, Very High Fire Hazard Severity Zones, illustrates the location of the very high fire severity zone within the city and its SOI. As depicted in this figure, the VHFHSZ is mapped along the northern city boundary and SOI and in the north-central portion of the city. Additionally, Figure 5.20-3 illustrates the Wildland Urban Interface Area (WUIFA) within the city and its SOI. The WUIFA roughly corresponds to the VHFHSZ.

Mutual Aid Agreements

The city of Rancho Cucamonga actively participates in a range of mutual automatic aid agreements designed to improve its capability to respond to fire-related emergencies and receive assistance from neighboring agencies. Rancho Cucamonga is under contract with the San Bernardino County Fire Department/CAL FIRE to provide fire protection and suppression services for the areas around the city. The following agencies provide mutual aid (San Bernardino County 2014):

- USFS, San Bernardino National Forest
- Cal OES Emergency Management.
- Chino Valley Independent Fire District

- San Bernardino County Fire Chino Valley Fire Protection District
- San Bernardino County Fire Department
- Chino Institute for Men Fire Department
- Chino Institute for Woman Fire Department
- Montclair Fire Department
- Mt. Baldy Fire Department
- Ontario Fire Department
- Rancho Cucamonga Fire Protection District
- Upland Fire Department
- Ontario International Airport Fire Department

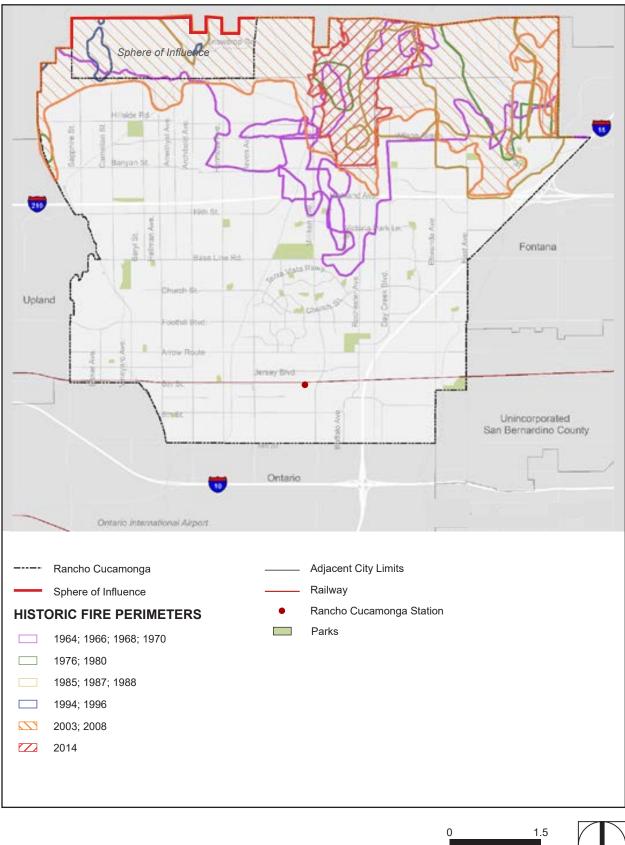
Postfire Debris Flow

Wildfires on hillsides can create hazards in the form of mud or debris flows. A debris flow is a form of slope failure and slippage, where a moving mass of loose mud, sand, soil, rock, vegetation, and water travels down a slope under the influence of gravity. Debris or mud flows occur most frequently on hillsides that have little to no vegetation and are most common following wildfires and as a result of storm events. Debris flows have a history of occurrence in southern California, some with devastating consequences.

As part of its landslide hazard program, the USGS prepares postfire debris flow maps of major wildfires that document the likelihood of debris flows during a storm event. Maps indicate estimates of the likelihood of debris flow, their potential volume, and the combined relative debris flow hazard. These predictions are made at the scale of the drainage basin and for individual stream segment. Estimates are based on a design storm with a peak 15-minute rainfall intensity of 24 millimeters per hour (USGS 2021).

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Figure 5.20-1 - Historic Wildfire Perimeters 5. Environmental Analysis

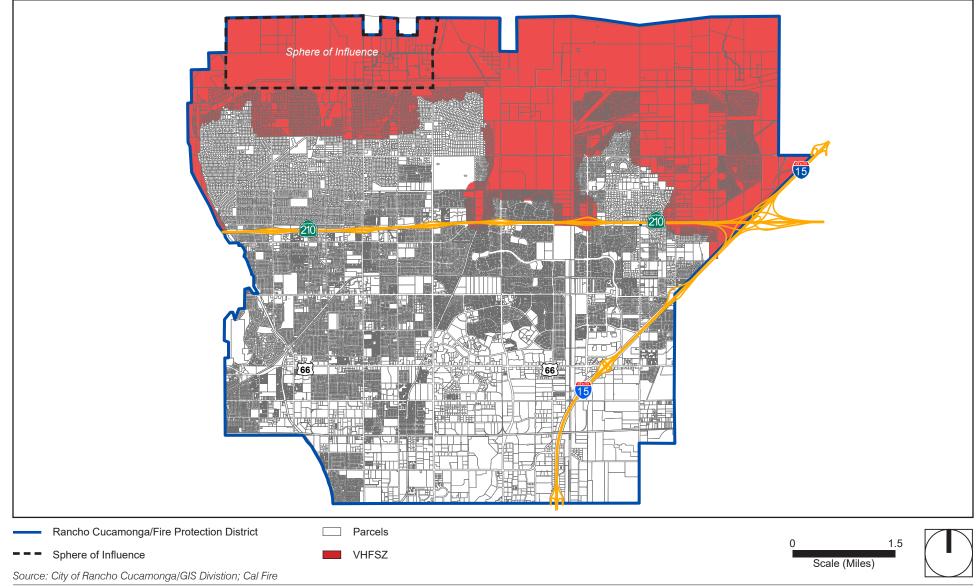


Source: Raimi + Associates, 2020; City of Rancho Cucamonga, 2020; SCAG, 2020; County of San Bernardino, 2020; CAI FIRE Historic Fire Perimeters, 2020



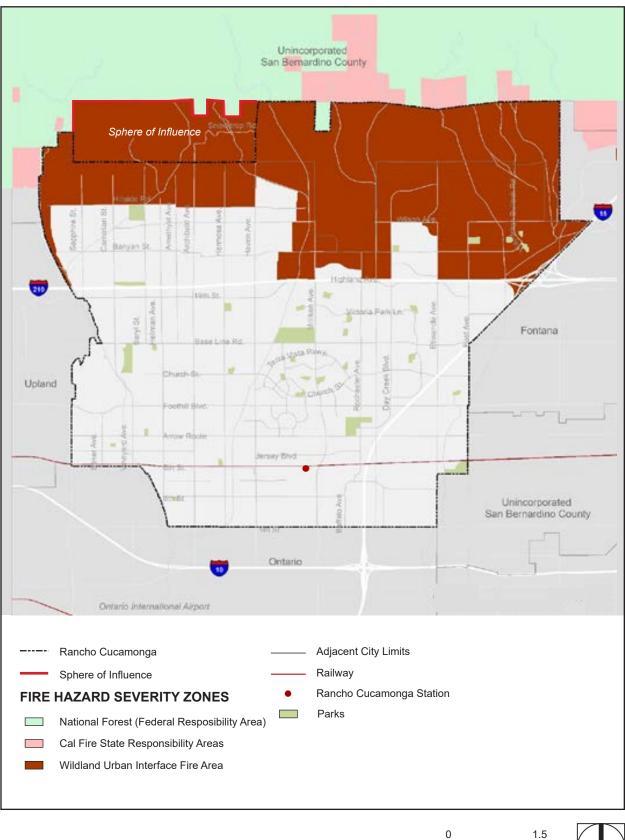
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Figure 5.20-2 - Very High Fire Hazard Severity Zones 5. Environmental Analysis



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Figure 5.20-3 - Wildland Urban Interface Fire Area (WUIFA) 5. Environmental Analysis



Source: Raimi + Associates, 2020; City of Rancho Cucamonga, 2020; SCAG, 2020; County of San Bernardino, 2020; CAI FIRE, 2007 Scale (Miles)

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Fire Protection Services

Refer to Section 5.15, *Public Services*, for information on fire protection resources. The Rancho Cucamonga Fire Protection District (RCFPD) is an "all risk" department, responding to fires, medical emergencies, and hazardous conditions within the city. The RCFPD also participates in mutual and contractual aid. There are seven RCFPD fire stations, as well as the fire station headquarters located near the intersection of Haven Avenue and Foothill Boulevard. Within the regional area, San Bernardino County Fire Department or other local jurisdictional fire units respond to service calls. See Figure 5.15-1, *Rancho Cucamonga Fire District Station Map*, for the locations of fire stations within the city.

Evacuation Routes

Rancho Cucamonga's location makes it susceptible to wildfires, earthquakes, and floods. Most major roadways within or existing the community in the northern portion of the city and SOI are crossed by one or more disaster prone areas–including WUIFA, VHFSZs, and 100-year flood zones. These disasters can cause significant damage to transportation infrastructure, preventing or impeding access by emergency responders and evacuation by residents. Regional access is limited to the I-15 running along the eastern edge of the city, SR-210 running east to west through the city, and I-10 that is located just one mile south of the city and runs in an east to west direction through the region. Although all of these freeways can be affected by wildfires, they are the primary areawide evacuation routes, with major north-south and east-west roadways in the city connecting Rancho Cucamonga to adjacent cities.

The RCFPD's Emergency Management Division is responsible for maintaining and updating the City's emergency plans, which have updated evacuation plans for different areas in the city. Additionally, the RCFPD requires a Fire Protection Plan for all development within hazardous fire areas that also addresses emergency access and evacuation (Rancho Cucamonga 2009). Rancho Cucamonga hosts the ReadyRC Academy that prepares individuals for various emergencies and disasters. ReadyRC has prepared an informational guide designed so that community members have the tools necessary to respond to and recover from fire, flood, wind, and earthquake hazards. The guide also includes evacuation routes and centers that residents can use during emergencies (Rancho Cucamonga 2017). The City also maintains a Community Emergency Response Team (CERT) program where community members learn the various hazards they are most susceptible to in their local jurisdiction, preparedness methods, mitigation efforts and the various types of evacuations, with an emphasis that direction/route can easily change and is incident driven (Rancho Cucamonga 2020a).

5.20.2 THRESHOLDS OF SIGNIFICANCE

The City uses Appendix G to ensure that all the CEQA topics are addressed in an EIR. The following statements are from Appendix G of the CEQA Guidelines. For purposes of this EIR, a project would normally have a significant effect on the environment if the project would:

- W-1 Substantially impair an adopted emergency response plan or emergency evacuation plan.
- W-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- W-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- W-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

5.20.3 PROPOSED GENERAL PLAN GOALS AND POLICIES

The following are relevant goals and policies of the Rancho Cucamonga General Plan Update, which may contribute to reducing potential wildfire impacts as a result of the proposed Project:

Land Use and Community Character Element

LC-2.9: Buffer Zones. Require development projects to incorporate buffer zones when determined to be necessary or desirable to serve as managed open space for wildfire safety and vegetation fuel modification.

Open Space Element

OS-1.10: Buffer Zones. Provide buffer zones, as appropriate and necessary, to serve as managed open space for wildfire safety and vegetation fuel modification. Buffer zones may include trails, small recreational amenities, information kiosks and signage, and even staging points for fire vehicles.

Mobility and Access Element

MA-2.8: New Streets. Require new roadway connections to improve emergency accessibility and roadway connectivity north of State Route 210 and within the Southeast Area.

- MA-3.4: Emergency Access. Prioritize development and infrastructure investments that work to implement, maintain, and enhance emergency access throughout the community.
- H-3.1: Homeless Services. Provide assistance as it becomes available towards efforts of local organizations and community groups to provide emergency shelters, transitional housing opportunities, and services to the city's homeless population and those at-risk of homelessness.
- **H-5.3: Development Review Process.** Facilitate the development review process for new housing through multiple techniques, including staff assistance, public information, articles in the City's newsletter, informal meetings with applicants, and Preliminary Review applications to address technical issues and facilitate the production of quality housing.

Resource Conservation Element

RC-3.7: Urban Forestry Plan. Minimize damage associated with wind-and firerelated hazards and risks and address climate change and urban heat island effects through the development of an urban forestry plan that addresses and proper and appropriate landscaping, plant and tree selection and replacement, planting and vegetation management techniques.

Safety Element

GOAL S-1: LEADERSHIP. A city that is recognized for its leadership role in resilience and preparedness.

- **S-1.1: City Staff Readiness.** Ensure City staff and departments demonstrate a readiness to respond to emergency incidents and events.
- **S-1.2: Culture of Preparedness.** Promote a culture of preparedness for businesses and residents that empowers them to increase their resilience to hazard related events and a changing climate.
- **S-1.3: Evacuation Capacity.** Require new developments, redevelopments, and major remodels to enhance the city's evacuation network and facilities and comply with the City's Evacuation Assessment.
- S-1.4: WUIFA Access Points. Require all new developments and redevelopments within the WUIFA to provide a minimum of two points of access by means of public roads that can be used for emergency vehicle response and evacuation purposes.
- S-1.5: Enhanced Circulation. In areas of the city with limited access routes and circulation challenges, require additional roads and improvements to ensure adequate emergency vehicle response and evacuation.

- **S-1.6: Evacuation Road Widths.** Require any roads used for evacuation purposes to provide at least 26 feet of unobstructed pavement width.
- S-1.7: Maintenance of Plans. Maintain and regularly update the City's Local Hazard Mitigation Plan (LHMP) as an integrated component of the General Plan, in coordination with the Community Wildfire Protection Plan (CWPP), the Emergency Operations Plan (EOP), the Evacuation Plan, and Standardized Emergency Management System (SEMS) compliant disaster plans to maintain eligibility for grant funding.
- **S-1.8: Regional Coordination.** Ensure regional coordination continues with neighboring jurisdictions, County, State, and Federal agencies on emergency management and risk reduction planning and activities.
- **S-1.9: Mutual Aid.** Ensure mutual aid agreements with Federal, State, local agencies, and the private sector establish responsibility boundaries, joint response services, and multi-alarm and station coverage capabilities.

GOAL S-3: WILDFIRE HAZARDS. A community where wildfire impacts are minimized or reduced through investments in planning and resilience.

- S-3.1: Fire Risk Reduction. Apply all state and local codes and regulations (fire safe design, adherence to Standard 49-1) to new development, redevelopment, major, and existing non-conforming uses remodels in the WUIFA.
- S-3.2: Fire Protection Plans. All new development, redevelopment, and major remodels in the WUIFA will require the preparation of Fire Protection Plans (FPPs) to reduce fire threat, in accordance with Fire District policies and procedures.
- **S-3.3:** Vegetation Management. Owners of properties and public/ private roads within and adjacent to the WUIFA are required to conduct brush clearance and fuel modification to reduce fire ignition potential and spread.
- **S-3.4: Buffer Zones.** Require development projects to incorporate buffer zones as deemed necessary by the City's Fire Marshal for fire safety and fuel modification.
- **S-3.5: Water Supply.** All developments will meet fire flow requirements identified in the Fire Code.
- **S-3.6: Coordination with Agencies.** Coordinate with State, regional, and local agencies and service providers on fire risk reduction planning and activities.
- **S-3.7:** Wildfire Awareness. Assist residents and property owners with being better informed on fire hazards and risk reduction activities in the WUIFA.

S-3.8: New Essential Facilities (WUIFA). Prohibit the siting of new essential public facilities (including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities) within the WUIFA, unless appropriate construction methods or strategies are incorporated to minimize impacts.

5.20.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance that are identified in brackets after the impact statement.

Impact 5.20-1: Buildout of the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. [Threshold W-1]

The City of Rancho Cucamonga has prepared an EOP and an Evacuation Assessment to ensure the most effective allocation of resources during times of emergency for the maximum benefit and protection of the civilian population. Additionally, the City's LHMP is designed to provide mitigation measures to address local hazards. Finally, the City's Community Wildfire Protection Plan (CWPP) assists the community to define the level of risk, assess vulnerability, provide guidance for reducing risks, manage vegetation fuels, increase preparedness, formulate prefire response and evacuation plans, and increase community resiliency to allow residents and businesses to return living conditions to normal as quickly as possible (Rancho Cucamonga, 2020a).

Buildout of the city under the proposed General Plan Update would not result in substantial changes to the circulation patterns or emergency access routes in the city or SOI identified in the City's LHMP and EOP. The Emergency Management Division of the RCFPD coordinates emergency management functions within Rancho Cucamonga and the RCFPD adheres to the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) (CalEMA 2009). During an emergency, standard emergency response procedures of the Rancho Cucamonga Police Department and RCFPD are conducted in tandem. The RCFPD also works with an array of community partners, including utility service provides (water, power, sanitation), schools, residents, community organization, and other local stakeholders. Mutual aid agreements are also maintained with numerous surrounding local, state, and federal agencies to allow for appropriate backup services in case of an emergency, disaster, or other similar event (Rancho Cucamonga 2020a). ReadyRC, the Academy that prepares individuals for various emergencies and disasters has published a guide that includes evacuation routes and centers that residents can use during emergencies (Rancho Cucamonga 2017).

Future development would be required to comply with applicable fire and building codes. To ensure emergency services in the city and SOI are not impaired by future development, all development projects in the city and SOI are reviewed by the RCFPD, prior to approval. As part of the 2019 Building Code adoption process, RCFPD has amended the Fire Code to require two points of access for all new development and for areas proposing increased residential densities. In accordance with the California Fire Code, the RCFPD requires site design to consider fire access. Several of these requirements include, vegetation management

requirements, construction standards, and subdivision and building access, among others (Rancho Cucamonga 2021). New development is required to comply with these regulations to provide sufficient clear emergency vehicle access.

Additionally, proposed General Plan policies S-1.3, S-1.4, S-1.5, S-1.6, S-1.7, and S-1.9 would ensure effective emergency response. Therefore, proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan and this impact would be less than significant.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.20-1 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.20-1 would be less than significant.

Impact 5.20-2: The proposed project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors, thereby exposing project occupants to elevated particulate concentrations from a wildfire. [Threshold W-2]

The city of Rancho Cucamonga and its SOI are vulnerable to and at significant risk of wildfires. Bordered by the San Bernardino National Forest on the north, and with the open space area within the Etiwanda Preserve, the city is in proximity to areas with fuel mixes that could easily ignite and encroach into the community. During a wildfire event, people within the air basin are exposed to elevated levels of particulates. The type and extent of vegetation and fuel, wind and climatic patterns, general topography and canyons, and other local characteristics make the city more vulnerable to wildfires.

Figure 5.20-3, *Wildland Urban Interface Area*, depicts the Wildland Urban Interface Area in Rancho Cucamonga and its SOI. The WUIFA includes areas potentially threatened by wildfires based on historical fire activity and prevalent vegetation types. Residential neighborhoods, commercial zones, and open space areas are all located in the WUIFA. Development associated with buildout of the General Plan Update would result in new development in the WUIFA and would place more assets in the VHFHSZ, as depicted in Figure 5.20-2. To protect development in the WUIFA, the city requires adherence to a wide range of state and local codes (California Fire Code, CAL FIRE fire safe design requirements, City Fire and Public Works Standards, RCFPD wildfire requirements, and other standards). These include restrictions on hillside development. Because development in the WUIFA presents challenges for fire protection and suppression, development in these areas would be required to abide by those requirements.

With adherence to the above building practices and wildfire management requirements, development associated with the General Plan buildout would not exacerbate wildfire risk and impacts would be less than significant. No mitigation is required.

Additionally, proposed General Plan policies S-1.3, S-1.4, S-1.5, S-1.6, S-1.8, S-1.9, and S-3.3 to minimize risk from wildfire to reduce associated poor air quality generated during a wildfire event.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.20-2 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.20-2 would be less than significant.

Impact 5.20-3: The proposed project would require the installation and maintenance of associated infrastructure in areas that are undeveloped or vacant, which could exacerbate fire risk or result in temporary or ongoing impacts to the environment. [Threshold W-3]

Buildout of the General Plan Update would result in additional infrastructure, such as roadways and transmission lines, in underdeveloped and undeveloped areas of the city and SOI in order to serve new development. Some of this new infrastructure would likely be constructed in the WUIFA or VHFHSZ. To protect development in these areas from the risk of wildfire, the City requires adherence to a wide range of state and local codes. These include regulations under the California Fire Code that provide minimum standards to increase the ability of a building to resist the intrusion of flames or embers from a vegetation fire and building with materials that meet performance standards, CAL FIRE fire safe design requirements that include standards for setbacks and maintenance of defensible space and for secondary egress, City Fire and Public Works Standards described in the Standard Conditions of Approval noted previously, RCFPD wildfire requirements that include steps for home maintenance and landscaping practices, as well as emergency and evacuation preparation, and other standards and recommendations outlined in the City's EOP, Evacuation Assessment, LHMP, and CWPP (ICC Digital Codes 2019, CAL FIRE 2020, Rancho Cucamonga 2020d).

Additionally, the General Plan Update includes Policies S-1.1 through S-1.9 and S-3.1 through S-3.8 to minimize risk from wildfire hazards. With adherence to these building practices and policies, buildout under the General Plan Update would be less than significant. No mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.20-3 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.20-3 would be less than significant.

Impact 5.20-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. [Threshold W-4]

Wildfires on hillsides can create hazards in the form of debris or mud flows. Debris or mud flows occur most frequently on hillsides that have little to no vegetation and are most common following wildfires. As identified previously, to protect development within the WUIFA or VHFHSZ, the City requires adherence to a wide range of state and local codes. These include regulations under the California Fire Code that provide minimum standards to increase the ability of a building to resist the intrusion of flames or embers from a vegetation fire and building with materials that meets a certain performance standard, CAL FIRE fire safe design requirements that include standards for setbacks and maintenance of defensible space and for secondary egress, City Fire and Public Works Standards described in the Standard Conditions of Approval within this Chapter, RCFPD wildfire requirements that include steps for home maintenance and landscaping practices, as well as emergency and evacuation preparation, and other standards and recommendations outlined in the City's EOP, Evacuation Assessment, LHMP, and CWPP (ICC Digital Codes 2019, CAL FIRE 2020, Rancho Cucamonga 2020d).

Adherence to these codes and policies found within the General Plan Update would ensure that impacts associated with the General Plan buildout would not exacerbate wildfire risk.

Flooding

As indicated in Section 5.10, *Hydrology and Water Quality*, flood hazard zones cover approximately 3,857 acres of the city, while other areas within the city may experience flooding during a heavy precipitation event. As shown in Figure 5.10-2, *FEMA Flood Hazard Zones*, less than 10 percent of the city and SOI are subject to a 100-year flood event, although flood hazards have the potential impact a significant amount of the community. The counties of Orange, Riverside, and San Bernardino are working with the U.S. Army Corps of Engineers (USACE) to design and construct the Santa Ana River Mainstream Project which will provide increased flood protection to the communities in the three counties, and will include specific environmental restoration projects. It is anticipated that the project may be completed in 2021, pending Federal appropriations.

Development in flood hazard areas would be required to comply with flood protection standards that reduce vulnerability to flood impacts and ensure safe use and occupation of structures, such as Municipal Code 19.12, Floodplain Management Regulations. Additionally, the proposed policies of the General Plan Update, such as Policy S-4.1 which prohibits the siting and construction of new essential public facilities within flood hazard zones, Policy S-4.2 which requires all new development to minimize flood risk with siting and design measures, Policy S-4.3 which promotes compliance of 100-year floodplain requirements on properties located within the 500-year floodplain designation, Policy S-4.4, which requires new development to implement and enhance the Storm Drain Master Plan by constructing stormwater management infrastructure downstream a proposed project, and Policy S-4.5 which requires development within properties located adjacent or near flood zones to reduce or minimize run-off, would reduce impacts to less than significant.

With the implementation of applicable to federal, state, and local regulations during the construction and operational phases of future development, as well as the implementation of the General Plan Update policies, potential erosion, siltation, polluted runoff, or flood hazard impacts would be less than significant.

Landslides and Debris Flow

As indicated in Section 5.7, *Geology and Soils*, landslides refer to the ground movement of unstable slopes, and include rock falls, deep failure of slopes, and shallow debris flows. Areas with steep slopes, adverse joints or deep weathering have a potential for failure. Within the city and in the SOI, potential landslides or slope failure are expected in areas with steep slopes in the northwestern corner. Additionally, slopes steeper than 25 percent are found on Red Hill, along Cucamonga Creek at the city's northwest edge, and at the foothills north of the city. Although the metamorphic basement rock at the hillsides of the city is stable, the steep slopes may cause rocks to fall during an earthquake or intense rainfall. Areas with rock fall hazards are confined to the hillsides at the northern edge of the city and SOI.

Stream systems from the eastern San Gabriel Mountains created alluvial fans beneath the city. These fans and washes represent debris flow events in the recent geologic period. The San Bernardino County Flood Control District maintains debris basins and flood-control facilities in the area to control debris flows and flooding hazards along the canyons, creeks, and washes.

Development in the hillsides is regulated by Chapter 17.52, Hillside Development of the Municipal Code, which includes design standards and guidelines intended to facilitate the appropriate development of hillside areas. Additionally, grading permits for hillside developments must have an engineering geology report prepared and submitted to the city. Implementation of requirements in Chapter 17.52 and adherence to recommendations in the required engineering geology report would ensure that impacts from landslides would be less than significant. No mitigation is required.

LEVEL OF SIGNIFICANCE

Level of Significance Before Mitigation: Impact 5.20-4 would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation: Impact 5.20-4 would be less than significant.

5.20.5 CUMULATIVE IMPACTS

Development associated with buildout of the General Plan Update would result in new development within the WUIFA and would place more assets in the VHFHSZ, as depicted in Figures 5.20-2 and 5.20-3. To protect development within the WUIFA, the City requires that future development adhere to a wide range of state and local codes, (California Fire Code, CAL FIRE fire safe design requirements, City Fire and Public Works Standards, RCFPD wildfire requirements, and other standards), as stated previously. These include restrictions on hillside development. Because development in the WUIFA presents challenges for fire protection and suppression, development in these areas would be required to abide by those requirements, development associated with the General Plan buildout would reduce wildfire risk; however, when combined with past and future development in the adjacent cities and unincorporated County area, the project's contribution to the cumulative impact would be cumulatively considerable.

5.20.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, all impacts would be less than significant.

5.20.7 MITIGATION MEASURES

No mitigation measures are required to reduce wildfire impacts.

5.20.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project specific impacts would be less than significant; the project's contribution to the cumulative impact, however, would be significant and unavoidable.

5.20.9 REFERENCES

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6. Unavoidable Impacts, Irreversible Changes, and Growth-Inducing Impacts

6.1 SIGNIFICANT UNAVOIDABLE AND ADVERSE IMPACTS

At the end of Chapter 1, Executive Summary, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

Agriculture and Forest Resources

 Impact 5.2-1: The proposed project would convert Farmland to non-agricultural uses, but would not result in the conversion of forest land to non-forest uses. [Thresholds AG-1 and AG-5]

Air Quality

- Impact 5.3-2: The proposed project would cause construction-generated criteria air pollutant or precursor emissions to exceed South Coast AQMDrecommended thresholds. [Threshold AQ-2]
- Impact 5.3-3: The proposed project would result in a net increase in long-term operational criteria air pollutant and precursor emissions that exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]
- Impact 5.3-5: The proposed project would expose sensitive receptors to substantial increases in toxic air contaminant emissions. [Threshold AQ-3]

Biological Resources

 Impact 5.4-1: Buildout of the proposed Land Use Plan would impact sensitive plant and animal species known to occur in the City of Rancho Cucamonga. [Threshold B-1]

Cultural Resources

 Impact 5.5-1: Buildout of the City of Rancho Cucamonga General Plan could impact historic resources. [Thresholds C-1]

Greenhouse Gas Emissions

 Impact 5.8-4: The proposed project would be inconsistent with the State's ability to achieve the long-term reduction goals or Executive Orders S-3-05, B-30-15, and B-55-18. [Threshold GHG-2]

Noise

- Impact 5.13-1: Construction activities would result in temporary noise increases in the vicinity of the future development under the General Plan. [Threshold N-1]
- Impact 5.13-2: Project implementation could generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess local standards. [Threshold N-2]
- Impact 5.13-4: Expose new sensitive land uses to noise levels in excess of the noise compatibility standards identified in 2040 General Plan Noise Element Table N-1. [Threshold N-4]
- Impact 5.13-5: Future development under the General Plan could generate short-term construction vibration or exposure to new sensitive land uses to longterm operational vibration sources that exceed City thresholds. [Threshold N-5]

Transportation

 Impact 5.17-2: The project may be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. [Threshold B-2]

6.2 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

Section 15126.2(c) of the CEQA Guidelines requires that an Environmental Impact Report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Specifically, the CEQA Guidelines state:

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 highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by the proposed project, should it be implemented:

Implementation of the proposed project would include construction activities that would entail the commitment of nonrenewable and/or slowly renewable energy resources; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Operation of the proposed project would require the use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The commitment of resources required for the construction and operation of the proposed project would limit the availability of such resources for future generations or for other uses during the life of the project.

- As increased commitment of social services and public maintenance services (e.g., police, fire, schools, libraries, and sewer and water services) would also be required. The energy and social services commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.
- An increase in vehicle trips would accompany project-related population growth. Over the long term, emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone (O³) and particulate matter (PM_{2.5} and PM₁₀) under the California and National Ambient Air Quality Standards (AAQS), and nonattainment for nitrogen dioxide (NO₂) under the California AAQS.
- The visual character of the city would be altered by the construction of the new structures, and adaptive reuse of others, landscaping, grading, and construction of the project site would also contribute to an altered visual character of the existing site. This would result in a permanent change in the character of the city and on- and off-site views in the vicinity.

Given the low likelihood that the land in the city would revert to its original form, the proposed project would generally commit future generations to these environmental changes.

Growth-Inducing Impacts of the Proposed Project

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

The proposed general plan encourages growth in areas of the city either currently planned to accommodate development or planned to expand on existing development. New growth is directed to focus areas taking advantage of existing and proposed transit such as high-speed rail and subway to the Ontario Airport. The city is a net exporter of jobs and one of the concepts in the proposed general plan is to increase employment opportunities so that residents can live and work in the city. Reducing the need to commute outside the city will reduce vehicle miles travelled thereby reducing greenhouse gas emissions. Because the growth is directed to areas already developed, it is not anticipated that major new infrastructure will be needed. The land use plan takes advantage of planned infrastructure expansion by others including high-speed rail and subway to the Ontario airport.

The city is choosing to accommodate both the assigned regional housing need and expansion of employment in this general plan anticipating that planning for and accepting growth will reduce pressure to develop other land in the surrounding area. The proposed project is intended to result in transformative change in the focus areas identified in the general plan so that the surrounding neighborhoods can experience only minor incremental change. Subsequent actions will include an update to the development code and other supporting ordinances to realize the vision of the plan. The proposed project is precedent setting as the city anticipates becoming a regional leader in compact urban development, improved pedestrian access and mobility, and providing a wide range of housing and employment opportunities. The city hopes to streamline approval of projects that are consistent with the general plan by tiering from this EIR, adopting and implementing standard conditions of approval, and customized zoning that will include form-based elements. Nonetheless, future development will need to demonstrate consistency with the general plan and that projectspecific environmental impacts have been addressed. As this EIR addresses the citywide impacts associated with future growth, and site-specific analysis will need to be prepared to demonstrate compliance, subsequent impacts would not significantly affect the environment.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

Over time the city anticipates the need to expand services to meet the needs of growth envisioned in the general plan. There are several mechanisms in place to ensure there is adequate funding for expansion such as annual budgets, development impact fees and coordination with local and regional agencies. The growth anticipated in this general plan is focused in central areas of the city where development is already planned or served by public services.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Development consistent with the general plan may have significant impacts on the existing environment. Even though growth is directed to the focus areas that have already been graded or built up, development outside of the focus areas in the city may impact sensitive biological resources. Impacts may also occur to historic resources including historic landscape, and tribal cultural resources, depending on the location of the development. Between the standard conditions of approval, existing city ordinances, and procedures such as tribal consultation, these impacts can either be reduced to less than significant or require preparation of a project-specific EIR. Although the proposed project would have a direct growth-inducing effect, indirect growth-inducing effects would be minimized due to the balance of land uses in the proposed project.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The proposed project is precedent setting into that it is not expanding the city limits to accommodate anticipated growth but directing most of the growth into specified focus areas on the interior of the city. While incremental growth will continue to occur throughout the city consistent with general plan designations, transformative growth is expected to occur in the focus areas taking advantage of transportation opportunities that exist today and those planned for the future such as high-speed rail and subway to Ontario airport. By design these focus areas will have more density and intensity than the existing general plan.

Zoning and associated ordinances that regulate development will be modified to help streamline those projects that are consistent with the general plan. The update to the zoning code will be public and take place after the general plan is adopted. The intent of the city is to streamline consideration and approval of projects consistent with the general plan.

The proposed project is also attempting to develop more jobs within the city limits to encourage residents that currently commute to work closer to home. This has the benefit of reducing vehicle miles traveled greenhouse gas emissions.

Finally, this general plan focuses on improving mobility and access for all residents to public services, and emphasizes pedestrian connectivity between neighborhoods, employment, schools, and recreation. The general plan considers trails and pedestrian connectivity both a recreational amenity and an essential component of the circulation system.

Some of these precedent setting policies activities could result in impacts on the environment. The citywide impacts are addressed in this EIR and mitigated through adherence to state and local laws and application of standard conditions of approval. Localized impacts would be addressed by the city when individual projects are proposed either as required by the zoning ordinance, CEQA, or the policies of this general plan. In some instances, no additional environmental analysis may be necessary, while in others additional environmental analysis up to and including a project-specific EIR may be required in order to address potential impacts. In all cases development projects will need to demonstrate consistency with the general plan, this EIR, and with ordinances and standard conditions of approval included adopted by the

City of Rancho Cucamonga General Plan Update Draft EIR 6. UNAVOIDABLE IMPACTS, IRREVERSIBLE CHANGES, AND GROWTH-INDUCING IMPACTS

city. Impacts of subsequent similar actions would require environmental analysis and associated mitigation to ensure that such subsequent impacts would not significantly affect the environment.

7. Alternatives to the Project

7.1 INTRODUCTION

7.1.1 PURPOSE AND SCOPE

Section 15126.6(a) of the State CEQA Guidelines requires EIRs to describe "a range of reasonable alternatives to the project..., which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives."

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives that are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. Section 15126.6(b) describes the purpose of the alternatives analysis as follows:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The State CEQA Guidelines suggest that alternatives should be compared to the proposed project's environmental impacts, and that the "no project" alternative be considered (State CEQA Guidelines Section 15126.6[e]). In defining "feasibility" (e.g., "feasibly attain most of the basic objectives of the project"), State CEQA Guidelines Section 15126.6(f)(1) states, in part:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

7.1.2 DEVELOPMENT OF PROJECT ALTERNATIVES

The range of alternatives included for analysis in an EIR is governed by the "rule of reason." 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 environmental 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 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 readers to make decisions about the project.

7.1.3 PROJECT OBJECTIVES

As described in Section 3.2, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

- 1. Provide a human-scaled design, with buildings and outdoor spaces oriented towards people connected by safe and comfortable streets, pathways, and trails that provide equitable access for all.
- 2. Focus transformative growth along major corridors and allowing incremental change in the neighborhoods.
- 3. Increase jobs in the City to encourage more residents to work locally and reduce commuting out of the City to work.
- 4. Maintain and enhance conservation areas.
- 5. Create vibrant activity nodes and a "real downtown" with one or several major activity centers, with varied cultural opportunities and public art providing areas for social, civic, and commercial activity.

7.1.4 SUMMARY OF SIGNIFICANT IMPACTS

Agriculture and Forest Resources

 Impact 5.2-1: The proposed project would convert Farmland to non-agricultural uses, but would not result in the conversion of forest land to non-forest uses. [Thresholds AG-1 and AG-5]

Air Quality

- Impact 5.3-2: The proposed project would cause construction-generated criteria air pollutant or precursor emissions to exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]
- Impact 5.3-3: The proposed project would result in a net increase in long-term operational criteria air pollutant and precursor emissions that exceed South Coast AQMD-recommended thresholds. [Threshold AQ-2]
- Impact 5.3-5: The proposed project would expose sensitive receptors to substantial increases in toxic air contaminant emissions. [Threshold AQ-3]

Cultural Resources

 Impact 5.5-1: Buildout of the City of Rancho Cucamonga General Plan could impact historic resources. [Thresholds C-1]

Greenhouse Gas Emissions

 Impact 5.8-4: The proposed project would be inconsistent with the State's ability to achieve the long-term reduction goals or Executive Orders S-3-05, B-30-15, and B-55-18. [Threshold GHG-2]

Noise

- Impact 5.13-1: Construction activities would result in temporary noise increases in the vicinity of the future development under the General Plan. [Threshold N-1]
- Impact 5.13-2: Project implementation could generate a substantial permanent increase in traffic noise levels at noise-sensitive land uses in excess local standards. [Threshold N-2]
- Impact 5.13-4: Expose new sensitive land uses to noise levels in excess of the noise compatibility standards identified in 2040 General Plan Noise Element Table N-1. [Threshold N-4]
- Impact 5.13-5: Future development under the General Plan could generate short-term construction vibration or exposure to new sensitive land uses to long-term operational vibration sources that exceed City thresholds. [Threshold N-5]

Transportation

 Impact 5.17-2: The project may be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT. [Threshold B-2]

7.1.5 ALTERNATIVES REJECTED FROM FURTHER CONSIDERATION

In accordance with CEQA Guidelines Section 15126.6, there were no alternatives suggested or rejected as infeasible during the Notice of Preparation (NOP) scoping process. However, the City nonetheless identified potential alternatives for consideration, yet ultimately eliminated these alternatives from further analysis in the EIR. Suitable alternatives are those which:

- 1. Can substantially reduce the proposed project's significant impacts;
- 2. Can attain most of the basic project objectives;
- 3. Are potentially feasible; and
- 4. Are reasonable and realistic.

Alternatives that do not meet each of these four criteria may be eliminated from further consideration in the EIR. The following alternatives have been considered by the City but rejected for their failure to meet the four criteria and, therefore, will not be analyzed further in this EIR.

7.1.6 ALTERNATIVES CONSIDERED AND REJECTED

The following is a discussion of project alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

7.1.6.1 Alternative Location

The proposed General Plan covers the entire City and the Sphere of Influence. Alternative locations are typically included in an environmental document to avoid, lessen, or eliminate the significant impacts of a project by considering the proposed development in an entirely different location. To be feasible, development of off-site locations must be able to fulfill the project purpose and meet most of the project's basic objectives. Given the nature of the proposed project (adoption of a General Plan for the entire city and sphere of influence), it is not possible to consider an off-site alternative because the city boundaries have been established through incorporation. For this reason, an off-site alternative was considered infeasible pursuant to State CEQA Guidelines Section 15126.6(c) and was rejected as a feasible project alternative.

7.1.6.2 Reduced Density Alternative

A reduced density alternative that would result in fewer residences and less non-residential development, which would theoretically reduce traffic and thereby reducing community impacts such as air quality, greenhouse gas (GHG) emissions, traffic, noise, and demand for utilities and public services. However, such an alternative would not achieve or would only partially achieve General Plan objectives of providing for growth of the City. This alternative would not increase jobs in the City, or foster growth along major corridors rather than in the neighborhoods. Further, such an alternative would not be consistent with regional planning that requires accommodation of regional housing needs. Finally, by significantly restricting growth, the environmental impact of the projected growth would increase development pressure elsewhere in the region. As a reduced development density conflicts with regional plans, would relocate impacts outside of the city, and would not meet the project objectives, this option was not evaluated in the EIR.

7.1.7 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in this section:

- No Project/Existing General Plan
- Distributed Land Use

An EIR must identify an "environmentally superior" alternative and if the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior.

7.2 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

The No Project Alternative is required to discuss the existing conditions at the time the notice of preparation is published and evaluate what would reasonably be expected to occur in the foreseeable future if the proposed project is not approved (CEQA Guidelines, Section 15126.6(e)). Pursuant to CEQA, this Alternative is also based on current plans and consistent with available infrastructure and community services. Therefore, the No Project/Existing General Plan Alternative assumes that the proposed General Plan would not be adopted, and the development intensity assumed in the existing General Plan would be followed. Table 7-1, 2010 General Plan Buildout, shows the projected holding capacity if all development occurred as originally projected.

	Baseline: 2009 General Plan Buildout: 2030							
Existing	City	SOI	Total	City	SOI	Total	Change	Percent
Dwelling Units	55,608	91	55,669	62,196	1,057	63,253	7,584	13.6%
Population	179,200	300	179,500	200,400	3,400	203,800	24,300	13.5%
Non- Residential Square Feet	80,030,100	-	80,030,100	99,797,700	0	99,797,700	19,767,600	24.7%
Employment	77,350	-	77,350	103,040	0	103,040	25,690	33.2%
	Baseline: 2020			General Plan Buildout: 2040				
	_							_
Proposed	City	SOI	Total	City	SOI	Total	Change	Percent
Proposed Dwelling Units	City 59,440	SOI 1,054	Total 60,494	City 79,615	SOI 1054	Total 80,669	Change 20,175	Percent 33.4%
Dwelling Units	59,440	1,054	60,494	79,615	1054	80,669	20,175	33.4%

Table 7-1 2010 General Plan Buildout

SOI: Sphere of Influence

^a This figure is an estimate derived from geographic information system files and is slightly less than the California Department of Finance housing estimate for 2009 housing stock

Source: Rancho Cucamonga 2009b.

Because the Planning Area would be the same under the 2010 General Plan and the proposed General Plan Update, the footprint-related impacts (e.g., biological resources, cultural resources) of the No Project Alternative would be the same as the proposed General Plan Update. The proposed General Plan Update has an estimated buildout population of 233,088, approximately 30,000 more residents than would occur under the No Project Alternative. The reduced population under this alternative would generally result in a reduction in intensity-related impacts. For example, this alternative would generate fewer auto trips, traffic noise would be less, and impacts on services and utilities would be less.

An objective of the proposed General Plan Update is to guide development into areas of the city that have the resources to accommodate it, or where the supportive resources can be easily provided. These areas include existing and planned regional connections to transit, as well as local mobility hubs. Therefore, while the intensity-related impacts would be less for the city overall under the No Project alternative, the resulting impacts would be greater than those of the proposed project. The proposed General Plan Update would reduce the intensity of these types of impacts on a per capita basis by taking advantage of the efficiencies of providing resources in the focus areas allowing for more non-motorized transportation, and a more efficient movement of people and goods.

It should also be noted that the growth not accommodated in the city under this alternative would likely occur in other communities in the region. This could result in encroachment into open space or other areas with sensitive resources if adequate developable land is not available in those communities. While this alternative would reduce overall impacts compared to the proposed General Plan Update, it would not likely reduce any of the identified significant impacts to a less than significant level.

The No Project alternative could provide a human-scaled design and maintain and enhance conservation areas, the current land use plan does not focus growth along major corridors, create a "real downtown" and the increase jobs under this alternative would be less than the proposed General Plan Update.

7.3 DISPERSED DEVELOPMENT ALTERNATIVE

Integral to the design of the proposed General Plan Update is a focus on placing new development along major transportation corridors that either have transit or will have excellent transit as the plan develops. These areas were identified in the 2010 General Plan, and the proposed General Plan expands on the development concepts for these areas. This emphasis on areas planned for intense development was done specifically to make the best use of transit and to help protect the older outlying neighborhoods from substantial growth.

This alternative would disperse the projected growth shown in Table 14-6, Buildout Projections from the Proposed Land Use Plan, over the entire City. Changes to the existing land use designations, like those of the proposed project, would be required to allow this growth to occur as the potential 2040 buildout population of 233,088 is greater than the 2030 buildout population potential of 203,800 as shown in Table 7-1. While this alternative was chosen to provide a counterpoint to the design approach taken in the proposed General Plan Update, the alternative also addresses the significant and unavoidable impacts associated with noise and air quality linked to building homes near busy transit corridors.

Like the No Project Alternative, this alternative would occur within the existing City limits and Sphere of Influence area. Therefore, the footprint-related effects would also be the same as the proposed General Plan Update. As noted above, this alternative would reduce the amount of development proposed in the General Plan Update along transit corridors, which would reduce the number of residents who would be exposed to noise and air pollutants generated in those areas. However, by diverting development outside these corridors, traffic generated in those areas would increase noise and air pollutants throughout the city, though at lower levels. Depending on the location of new development under this alternative, this alternative could expose parts of the city to noise and air pollutants that would not have been exposed under the proposed General Plan Update. By dispersing development into existing neighborhoods, this alternative will also change their character and visual appearance likely impacting aesthetics at a greater level than the proposed project.

This alternative assumes that the overall population and level of development would be the same as that for the proposed General Plan Update. However, dispersing development across the city would result in development pressure in some areas where adequate facilities may not be available. This could result in the need to upsize existing facilities, such as sewer and water lines, or widen roads. Having to upgrade facilities citywide rather than in select focus areas will be more expensive and disruptive to the existing neighborhoods. This type of citywide utility

expansion is not envisioned in the proposed General Plan Update that guides for more intense development into specific focus areas. In addition, the efficiencies gained by having development focused in areas with existing capacity for growth would not be realized under this alternative. A more dispersed development pattern would increase vehicle miles travelled, lead to substantive change in the neighborhoods, and not take advantage of existing and planned transit. The increase in personal vehicle trips would also use more energy and generate more emissions than under the proposed General Plan. For these reasons, this alternative would not reduce overall impacts compared to the proposed General Plan Update, and it would not reduce any of the identified significant impacts to a less than significant level.

This alternative could provide human-scaled design, increase jobs in the City, and maintain and enhance conservation areas, but by dispersing development across the city, it would not focus transformative growth along major corridors or create vibrant activity nodes and a "real downtown."

7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" to the proposed project. Because the No Project Alternative (implementation of the 2010 General Plan) would result in an overall reduction in the level of impacts identified for the proposed General Plan Update, the No Project Alternative has been identified as "environmentally superior" to the proposed project. However, in cases where the "No Project Alternative" is environmentally superior to the proposed project, the environmentally superior development alternative must be identified.

Торіс	Project Environmental Determination	No Project	Dispersed Development
Aesthetics	SU	=	+
Agriculture and Forestry Resources	SU	=	=
Air Quality	SU	-	+
Biological Resources	SU	+	=
Cultural Resources	LSM	=	=
Energy	LS	-	+
Geology and Soils	LSM	=	=
Greenhouse Gas Emissions	SU	-	+
Hazards and Hazardous Materials	LS	=	=
Hydrology and Water Quality	LS	=	=
Land Use and Planning	LS	=	=
Mineral Resources	SU	=	=

Table 7-2	Comparison of Project Alternatives to the Proposed Project
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Торіс	Project Environmental Determination	No Project	Dispersed Development
Noise and Vibration	SU	-	+
Population and Housing	LS	-	=
Public Services	LS	-	+
Recreation	LS	-	=
Transportation	SU	-	+
Tribal Cultural Resources	LS	=	=
Utilities & Service Systems	LS	-	+
Wildfire	LS	=	=
Overall		=	+

Note: The symbols in the table indicate the following: No Impact (NI), Less Than Significant (LS), Less Than Significant with Mitigation (LSM), Significant and Unavoidable (SU); Similar Impacts (=), Less Severe Impacts (-), More Severe Impacts (+)

In addition to lessening significant impacts, an alternative must also attempt to meet most of the Project Objectives. Table 7-3, *Comparison of Alternatives to Project Objectives*, compares each of the alternatives to the Project Objectives.

Table 7-3 Comparison of Alternatives to Project Objectives

	Objective	No Project	Dispersed Growth
1.	Provide a human-scaled design, with buildings and outdoor spaces oriented towards people connected by safe and comfortable streets, pathways, and trails that provide equitable access for all.	Does Not Meet	Does Not Meet
2.	Focus transformative growth along major corridors and allowing incremental change in the neighborhoods.	Does Not Meet	Does Not Meet
3.	Increase jobs in the City to encourage more residents to work locally and reduce commuting out of the City to work.	Does Not Meet	Meets
4.	Maintain and enhance conservation areas.	Does Not Meet	Meets
5.	Create vibrant activity nodes and a "real downtown" with one or several major activity centers, with varied cultural opportunities and public art providing areas for social, civic, and commercial activity.	Does Not Meet	Does Not Meet
Ov	erall	Does Not Meet	Does Not Meet

The Proposed Project has been identified as the environmentally superior alternative because this alternative would have fewer impacts related to air quality, energy, greenhouse gas emissions, public services, and vehicle miles travelled, while achieving the benefits of the project objectives. This page intentionally left blank.

8. Organizations Consulted and Qualifications of Preparers

8.1 ORGANIZATIONS CONSULTED

LEAD AGENCY (CITY OF RANCHO CUCAMONGA)

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FEHR AND PEERS

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ATLAS PLANNING

Aaron Pfannenstiel, Principal

STRATEGIC ECONOMICS

Sujata Srivastava, Principal Jake Cummings, Associate Heather Bromfield, Associate

LISA WISE CONSULTING

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